SONY

CAMERA ADAPTOR

CA-701

Digital BETACAM™

MAINTENANCE MANUAL

1st Edition

Serial No. 10001 and Higher (Except Japan)

Serial No. 30001 and Higher (Japan)

⚠警告

このマニュアルは，サービス専用です。
お客様が，このマニュアルに記載された設置や保守，点検，修理など行うと感電や火災，人身事故につながることがあります。
危険をさけるため，サービストレーニングを受けた技術者のみご使用ください。

⚠WARNING

This manual is intended for qualified service personnel only.
To reduce the risk of electric shock, fire or injury, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

⚠WARNUNG

Die Anleitung ist nur für qualifiziertes Fachpersonal bestimmt.
Alle Wartungsarbeiten dürfen nur von qualifiziertem Fachpersonal ausgeführt werden. Um die Gefahr eines elektrischen Schlages, Feuergefahr und Verletzungen zu vermeiden, sind bei Wartungsarbeiten strikt die Angaben in der Anleitung zu befolgen. Andere als die angegeben Wartungsarbeiten dürfen nur von Personen ausgeführt werden, die eine spezielle Befähigung dazu besitzen.

⚠ AVERTISSEMENT

Ce manual est destiné uniquement aux personnes compétentes en charge de l’entretien. Afin de réduire les risques de décharge électrique, d’incendie ou de blessure n’effectuer que les réparations indiquées dans le mode d’emploi à moins d’être qualifié pour en effectuer d’autres. Pour toute réparation faire appel à une personne compétente uniquement.

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Manual Structure

Purpose of this manual

This manual is the maintenance manual for Camera Adaptor CA-701.

Contents

The followings are summaries of the each section for understanding the manual.

Section 1 Service Overview
Describes information about connection and how to replace the main parts.

Section 2 Electrical Alignment
Describes electrical adjustment.

Section 3 Spare Parts
Describes parts list, exploded view, packing materials and supplied accessories list used in the unit.

Section 4 Semiconductor Pin Assignments
Describes function diagrams and pin names of semiconductor used in the unit.

Section 5 Block Diagrams
Describes overall block diagram and the block diagrams for every circuit board.

Section 6 Schematic Diagrams
Describes schematic diagrams for every circuit.

Section 7 Board Layouts
Describes board layouts for every circuit.

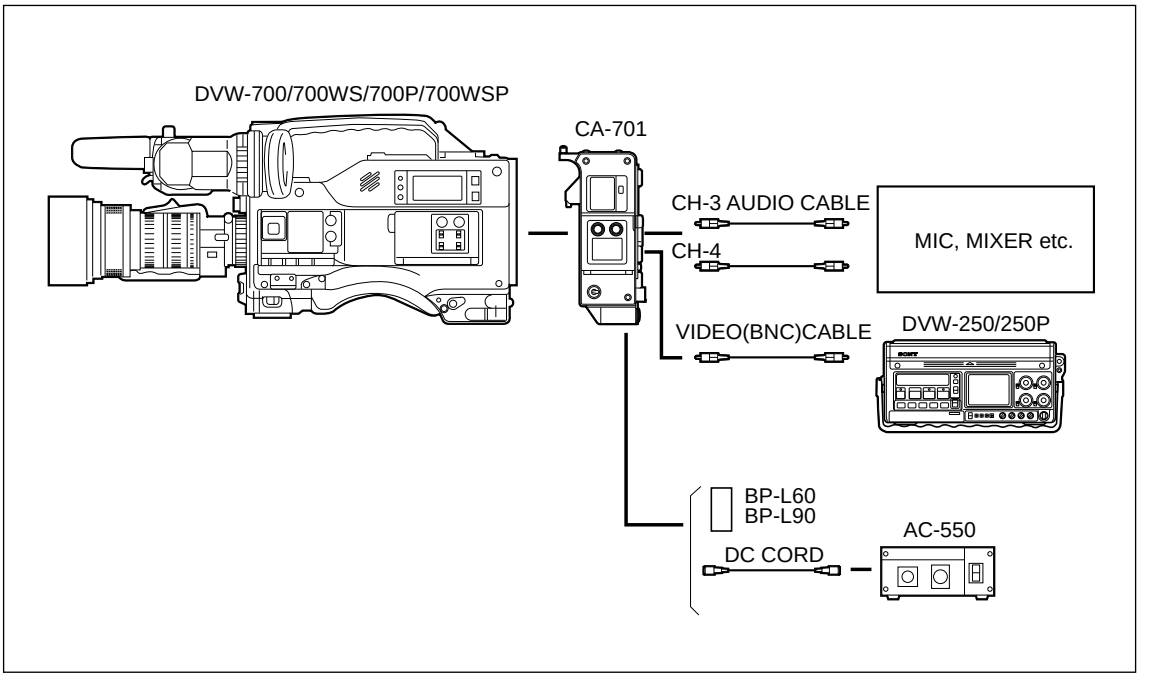
Relative manual

Besides this maintenance manual, the following manual is available for this unit.

- **Operation Manual (Supplied with this unit)**
  This manual is necessary for application and operation of this unit.

Section 1
Service Overview

1-1. System Configuration



1-2. Matching Connectors

When external cables are connected to the connector on the outside panel during maintenance, the hardware listed below (or the equivalents) must be used.

Panel indication	Matching cable connector/cable	
	Connector	Sony part No.
SDI OUT 1, 2	BNC	1-560-069-11
AUDIO IN CH-3, 4	XLR 3P, MALE	1-508-084-00
AUDIO OUT	XLR 5P, FEMALE	1-508-370-11
DC IN	XLR 4P, FEMALE	1-508-362-00
DC OUT	ROUND TYPE 4P, MALE	1-566-425-11

1-3. Connector Input/Output Signals

INPUT

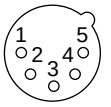
AUDIO IN CH-3, 4	–60 dBu/+4 dBu (0 dBu=0.775 Vrms)

OUTPUT

AUDIO OUT	0 dBu (600 Ω terminated)
HEADPHONE OUT	8 Ω load, –26 dBu
SDI OUT 1,2	75 Ω terminated, 0.8 V p-p, 270 Mbps

AUDIO OUT:XLR,5-pin (male)

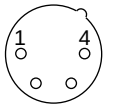
<External view>



Pin No.	Signal
1	GND
2	L CH (X)
3	L CH (Y)
4	R CH (X)
5	R CH (Y)

DC IN:XLR,4-pin (male)

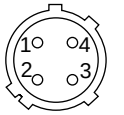
<External view>



Pin No.	Signal
1	UNREG GND
2	—
3	—
4	EXT DC (+) 12 V (10.5–17V)

DC OUT:DIN, 4-pin (female)

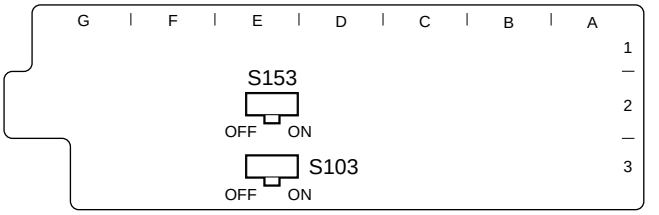
<External view>



Pin No.	Signal
1	UNREG GND
2	—
3	—
4	DC OUT

1-4. Setting the Switches on Board

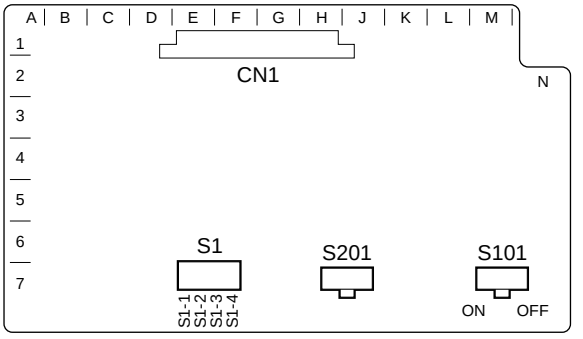
1-4-1. AD-119 board



B side

Ref No.	Name	Description	Factory setting
S103	CH-3 LIM ON-OFF	Selects whether to turn on or off the limiter in the CH-3 audio input stage. ON : CH-3 Audio INPUT LIMITER ON OFF: CH-3 Audio INPUT LIMITER OFF	OFF
S153	CH-4 LIM ON-OFF	Selects whether to turn on or off the limiter in the CH-4 audio input stage. ON : CH-4 Audio INPUT LIMITER ON OFF: CH-4 Audio INPUT LIMITER OFF	OFF

1-4-2. DA-98 board



A side

Ref No.	Name	Description	Factory setting
S1	—	Factory use	All OFF
S101	OUTPUT LIM ON-OFF	Selects whether to turn on or off the output limiter. ON : Audio OUTPUT LIMITER ON OFF: Audio OUTPUT LIMITER OFF	ON
S201	POWER ON BLOCK	Selects whether to power in the audio or the SDI block when the power switch is turned to SEL. Audio block only SDI block only*1	AUDIO

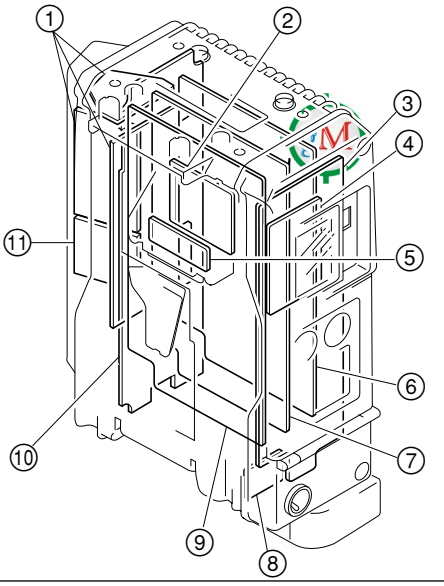
*1 : No display on the audio level meter LCD when only SDI block is powered .

1-5. Notes on System Connection

It is necessary to check the following items in the DVW-700/700WS/700P/700WSP when connect them to the CA-701. Perform the measures shown in the figure when the use conditions are not matched.

Check item	Use condition	Measures	Applicable serial No.
AT-84 board in the DVW-700 /700WS /700P/700WSP.	ROM(IC16) version is V2.10 or higher.	ROM replacement (P/N:8-759-390-05)	Serial No. 10001 to 10196 [DVW-700] Serial No. 90001 to 90015 [DVW-700]
SY-191 board in the DVW-700 /700WS/700P/700WSP.	ROM(IC1) version is V1.10 or higher.	IC replacement (QFP type P/N:8-759-388-93) (EPROM type P/N:8-759-398-40)	Serial No. 40001 to 40250 [DVW-700P] Serial No. 90001 to 90021 [DVW-700P] Serial No. 10001 to 10065 [DVW-700WS] Serial No. 90001 to 90002 [DVW-700WS] Serial No. 40001 to 40415 [DVW-700WSP]

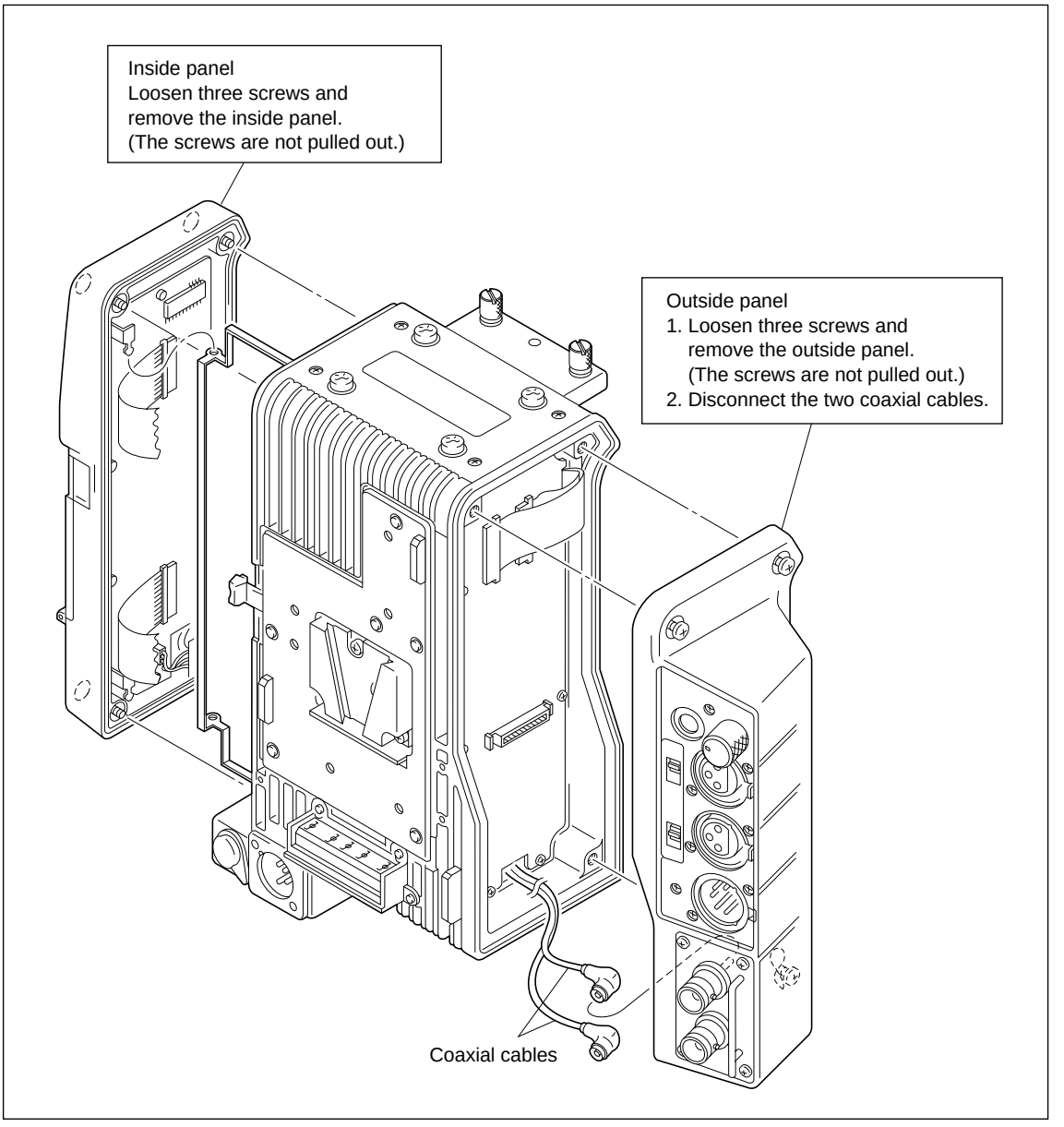
1-6. Board Layout



Board name	Circuit function	Location No.
AD-119	A/D converter	3
CN-1176	Connector	5
CN-1233	Connector	1
CN-1339	Connector	11
DA-98	D/A converter, System control	9
DIF-41	Serial digital interface	6
DP-234	Display	4
HN-225	Harness	2
MB-651	Mother board	10
RE-123	Regulator, DC-DC converter	7
SW-819	Switch	8

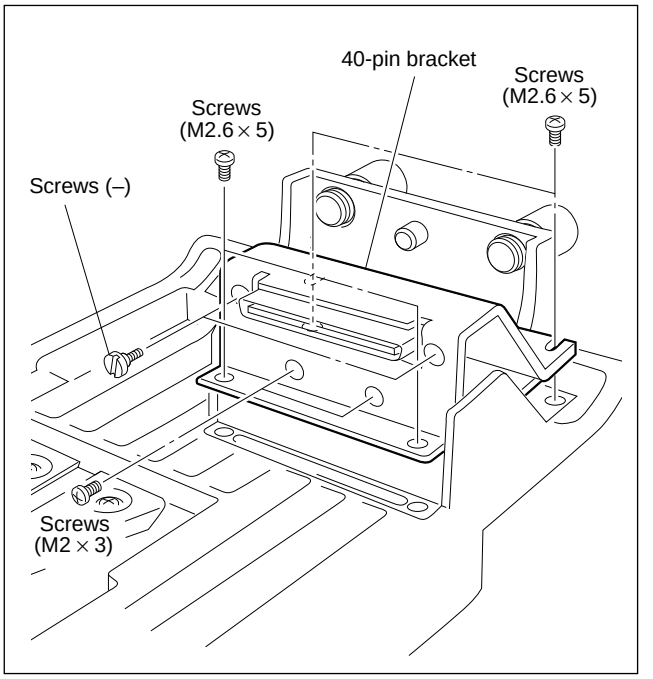
1-7. Replacement of Main Parts

1-7-1. Removal of cabinet

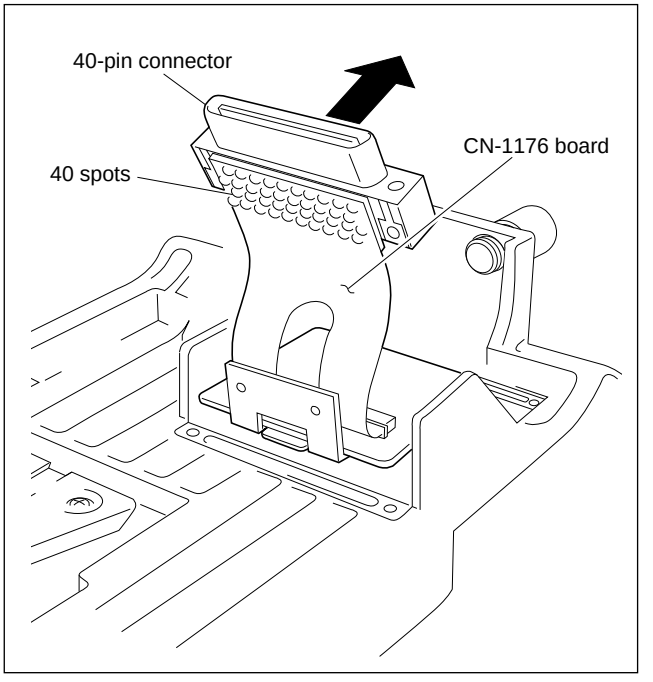

Inside panel
Loosen three screws and
remove the inside panel.
(The screws are not pulled out.)
Outside panel
1. Loosen three screws and
remove the outside panel.
(The screws are not pulled out.)
2. Disconnect the two coaxial cables.
Coaxial cables

1-7-2. Replacement of 40-pin connector

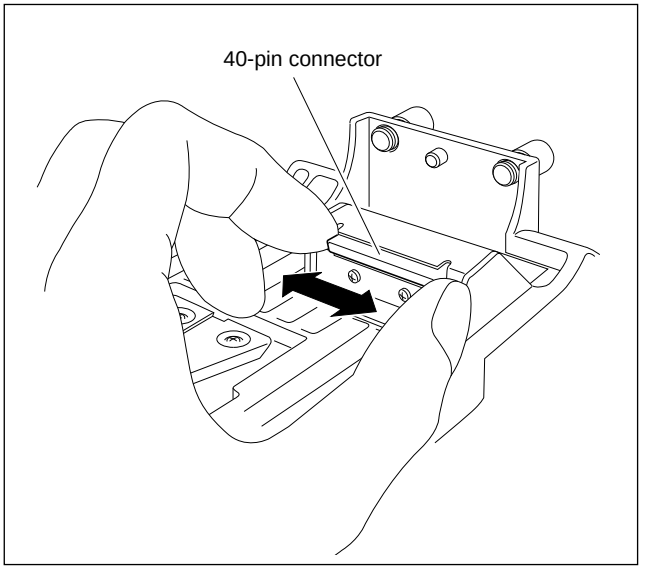
1. Remove the two screws (–).
2. Remove the six screws and remove the 40-pin bracket.



3. Desolder the CN-1176 board and remove the 40-pin connector.



4. Solder the new 40-pin connector on the CN-1176 board.
5. Attach the 40-pin connector in the reverse order of removal steps.
6. Check that the 40-pin connector is free by hand.

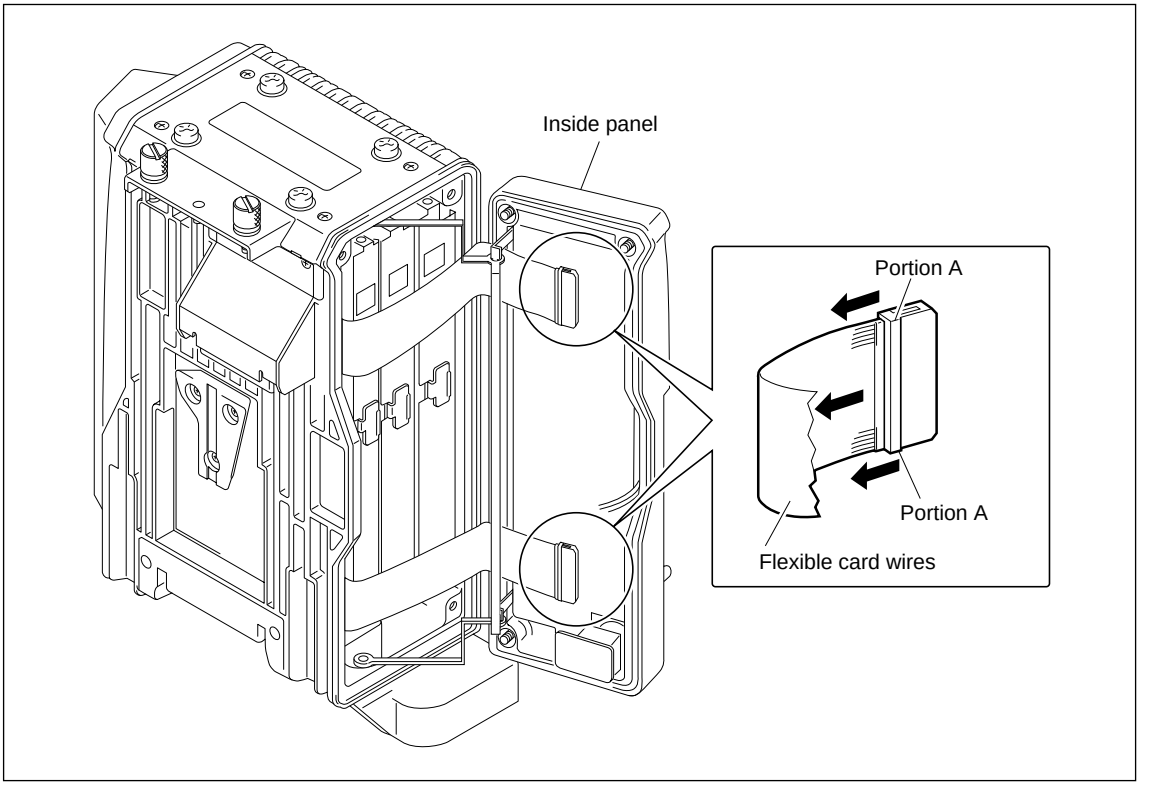


1-7-3. Removal/Installation of flexible card wires on AD-119 board

The two flexible card wires are used between the AD-119 board and MB-651 board.
Be careful not to bend these wires. This shortens the wire life.

Disconnecting

1. Turn off the power.
2. Slide portion A in the direction indicated by the arrow, unlock it, and pull out the flexible card wires.



Connecting

Note

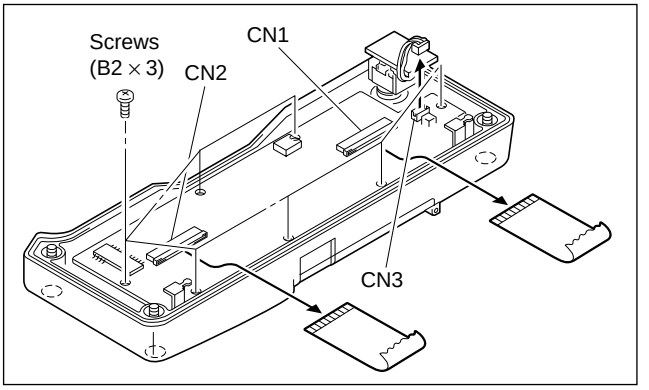
- Be careful not to insert the flexible card wire obliquely.
- Check that the conductive surface of the flexible card wire is not so soiled with dust.

1. Slide portion A in the direction indicated by the arrow and insert the flexible card wires tightly into each connector with the conductive surface of these wires put down.
2. Slide portion a in the reverse direction of the arrow and lock each connector.

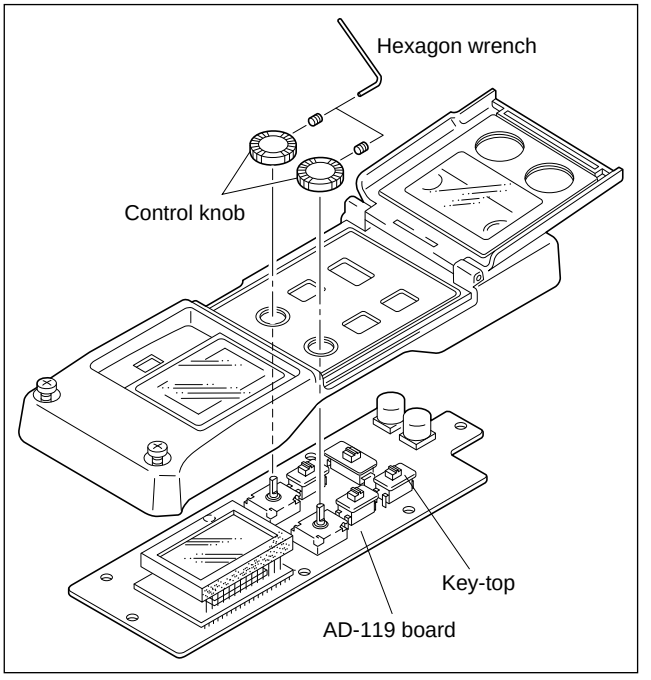
1-7-4. AD-119 Board Replacement

Removal

1. Remove the three screws and open the inside panel.
2. Disconnect the flexible card wires CN1,2 and connector CN3.
   (Refer to section 1-7-3, how to disconnecting the flexible card wires.)
3. Remove the seven screws fixing the ADA-119 board.



4. Remove the screws fixing the control knob and remove the control knob from the inside panel.
5. Remove the AD-119 board from the inside panel



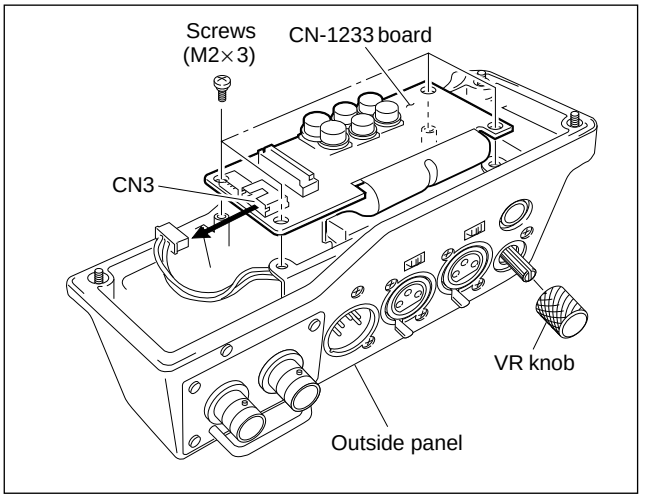
Note during installation

After attaching the AD-119 board, check the key-tops are attached with it.

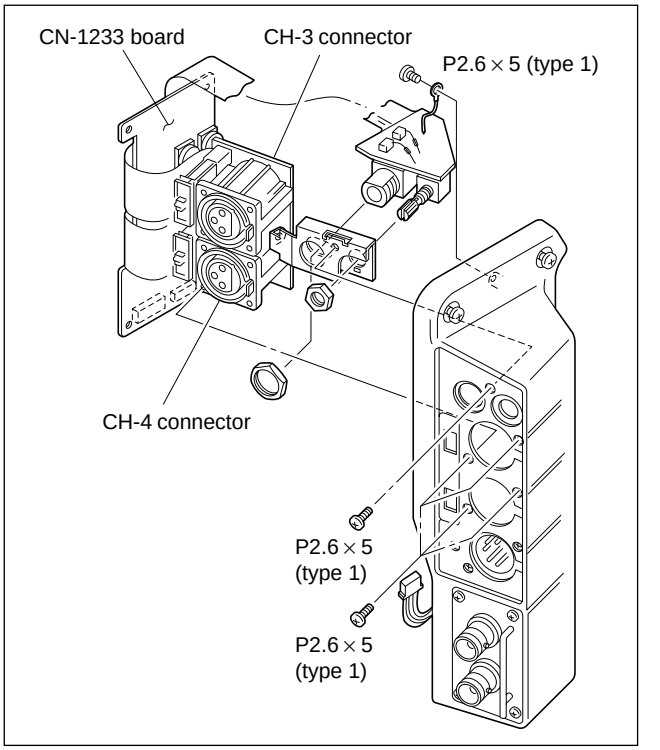
1-7-5. CN-1233 Board Removal

The three flexible card wires are used CN-1233 board. Be careful not to bend these wires. This shortens the wire life.

1. Remove the three screws and remove the outside panel.
2. Remove the VR knob and disconnect the connector CN3 on the CN-1233 board.
3. Remove the four screws.



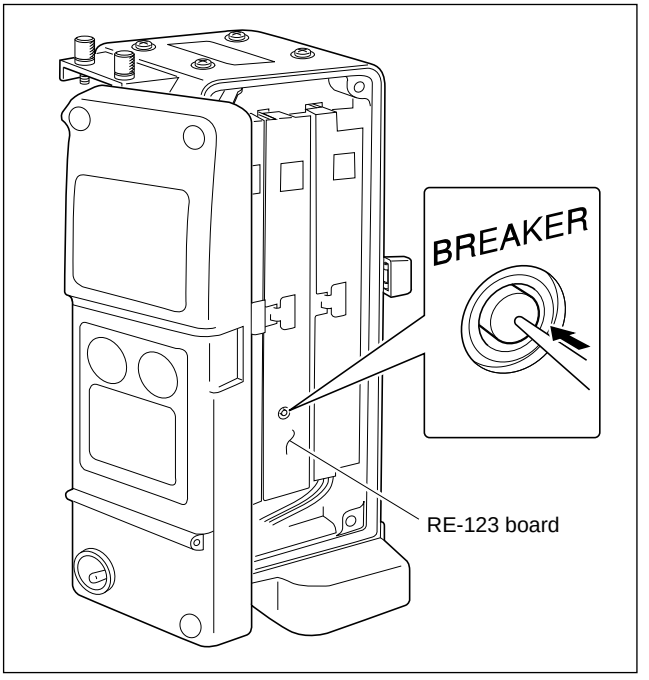
4. Remove the two screws fixing the connector CH-3 and CN-4.
5. Remove the two screws. And then remove the CN-1233 board from the outside panel



1-8. Notes on Service

1-8-1. Power circuit breaker

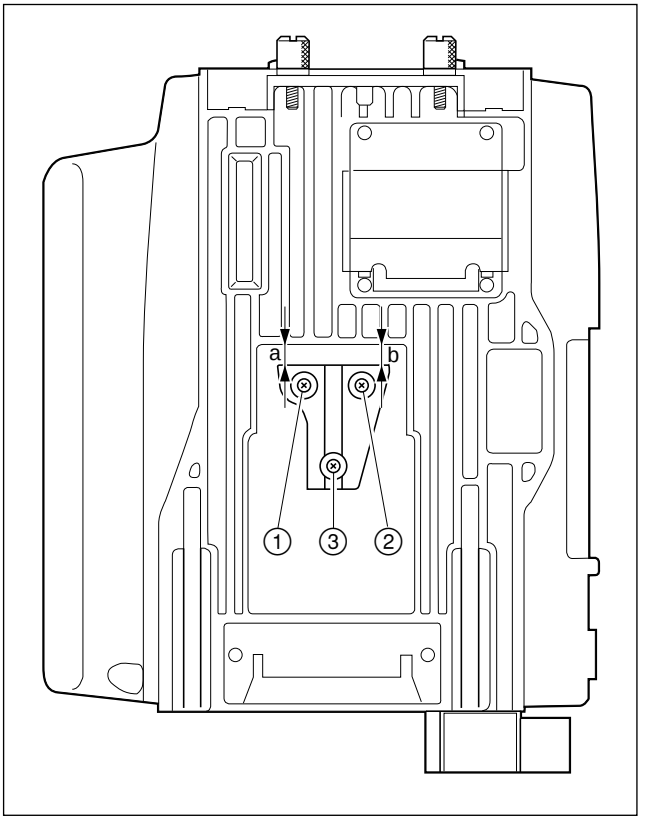
Excessive current in the internal circuitry, whatever the cause, will trip the internal circuit breaker, automatically cutting off the power. After checking that the problem has been corrected, press the button shown in the figure. The power should come on again.



1-8-2. Notes on replacement of V shoe

It is necessary to attach the V shoe on the main chassis with precisely position when will attach the CA-701 on the DVW-700 in absolute contact.
Tighten the three screws sequentially in the figure when attach the V shoe on the main chassis. When the V shoe is replaced, check that the specification is met.

Specification: a–b = 0 ± 0.1 mm



1-9. Tool

Extension board BC-155: J-6421-550-A

1-10. Notes on Spare Parts

1. Safety Related Components Warning

Components marked ⚠ are critical to safe operation. Therefore, specified parts should be used in the case of replacement.

2. Standardization of Parts

Some repair parts supplied by Sony differ from those used for the unit. These are because of parts commonality and improvement.
Parts list has the present standardized repair parts.

3. Stock of Parts

Parts marked with “o” at SP(Supply Code) column of the spare parts list may be not stocked. Therefore, the delivery date will be delayed.

4. Units Representation

The following represented units are changed or omitted in writing.

Units		Representation
Capacitance	µF	uF
Inductance	µH	uH
Resistance	Ω	Abbreviation
Temperature	°C	XXX-DEG-C

5. Destination Representation

The part indicated “For J/SY” in the spare parts list is used in the unit written below.

For J : The part is used in a unit for Japan.
For SY : The part is used in a unit for regions except the above countries.

Secton 2
Electrical Alignment

2-1. General Information for Electrical Adjustment

2-1-1. Notes for adjustment

- When a board is extracted, turn off the power of the CA-701 and a video camera.
- Before adjustment, turn the power on and warm up the unit for about 10 munites.

2-1-2. Equipment/Fixtures

Equipment/Fixtures	Model
Digital betacam camcorder	DVW-700/700WS/700P/700WSP
AC adapter or Battery	Sony AC-550/550CE or equivalent
Oscilloscope	Tektronix 2465B or equivalent
Audio analyzer	Tektronix AA501A (OP.02) or equivalent
Audio oscillator	Tektronix SG-5010 or equivalent
Frequency counter	Advantest TR5821AK orequivalent

2-2. Video System Adjustment

2-2-1. VCO Free-run Frequency Adjustment

Preparation

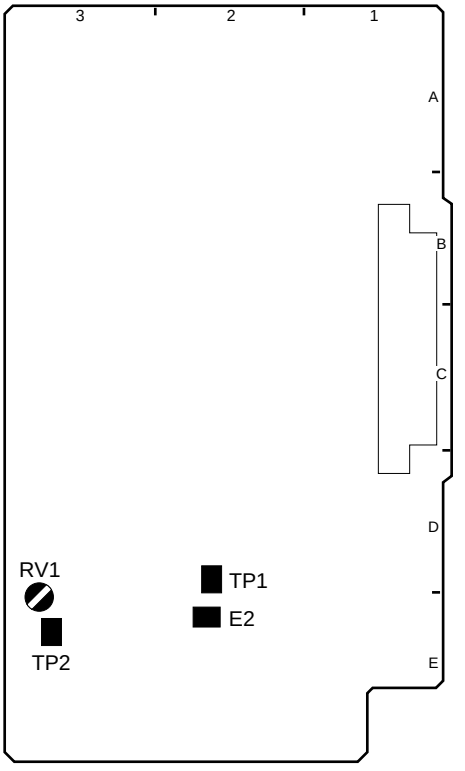
- Connect TP1 (D-2) and E2 (E-2) on the DIF-41 board using a shorting clip.
  And warm up the unit for about 10 minutes.

Adjustment procedure

1. Equipment : Frequency counter
   Test point : TP2 (E-3)/DIF-41 board
   Adjustment point : ⊘ RV1 (D-3)/DIF-41 board
   Specification : 27.0 ±0.1 MHz

Setting after adjustment

- Disconnect the shout clip.



DIF-41 Board (A side)

2-3. Audio System Adjustment

2-3-1. D/A Level Adjustment

Preparation

- S103 (E-3) /AD-119 board:OFF
- S101 (M-7) /DA-98 board:OFF
- MONITOR switch/inside panel:CH-3/-4
- OUTPUT switch/inside panel (DVW-700/700WS/700P/700WSP) :BARS
- Sets to record the -20 dBs in 1 kHz test signal of an internal signal generator using diagnostic mode of the DVW-700/700WS/700P/700WSP. (Refer to section 3-2. DIAGNOSTIC MODE of the DVW-700/700WS/700P/700WSP MAINTENANCE MANUAL Part 1.)

VTR MENU-4

VTR MODE SELECT-2

1. AUDIO OUT (F/R)	EE
2. AUDIO OUT (CH)	CH1/2
3. AU-REC CH3/CH4	ON
4. AU-REC 1kHz	–20dB ←
5. AU-EMPHASIS	OFF

VF screen

Adjustment procedure

1. MONITOR switch:MONO (CH-3)

2. Equipment : Audio analyzer
   Test point : AUDIO OUT connector
   Adjustment point : ⊘ RV101 (J-3)/DA-98 board
   Specification : 0 ±0.2 dBm (600 Ω)

3. MONITOR switch:MONO (CH-4)

4. Equipment : Audio analyzer
   Test point : AUDIO OUT connector
   Adjustment point : ⊘ RV151 (J-7)/DA-98 board
   Specification : 0 ±0.2 dBm (600 Ω)

Setting after adjustment

- Reset switches and DIAGNOSTIC mode to the former settings.

2-3-2. Output Limiter Adjustment

Preparation

- S101 (M-7) /DA-98 board:ON
- S103 (E-3) /AD-119 board:OFF
- S153 (E-2) /AD-119 board:OFF
- LINE/MIC CH-3 switch/outside panel:MIC
- MONITOR switch/inside panel:CH-3/-4
- AUDIO SELECT CH-3 switch/inside panel:MANUAL
- AUDIO SELECT CH-4 switch/inside panel:MANUAL
- OUTPUT switch/inside panel (DVW-700/700WS/700P/700WSP) :CAM

Adjustment procedure

1. Connect the output of audio oscillator (SG-5010) to the AUDIO IN CH-3 connector of CA-701.
   Test point : AUDIO IN CH-3 connector
   Specification : 1 kHz, -60 dBu

2. Equipment : Audio analyzer
   Test point : AUDIO OUT connector
   Adjustment point : ⊘ AUDIO LEVEL volume (CH-3) /inside panel
   Specification : 0 ±0.2 dBm (600 Ω)

3. Set output level of audio oscillator as follows.
   Test point : AUDIO IN CH-3 connector
   Specification : 1 kHz, -40 dBu

4. Test point : AUDIO OUT connector
   Adjustment point : ⊘ RV2 (K-7) /DA-98 board
   Specification : +9.0 ±0.2 dBm (600 Ω)

Setting after adjustment

- Reset switches to the former settings.

2-3-3. AGC Level Adjustment

Preparation

- S103 (E-3) /AD-119 board:OFF
- S153 (E-2) /AD-119 board:OFF
- LINE/MIC CH-3 switch/outside panel:LINE
- MONITOR switch/inside panel:CH-3/-4 and MONO (CH-3)
- AUDIO SELECT CH-3 switch/inside panel:AUTO

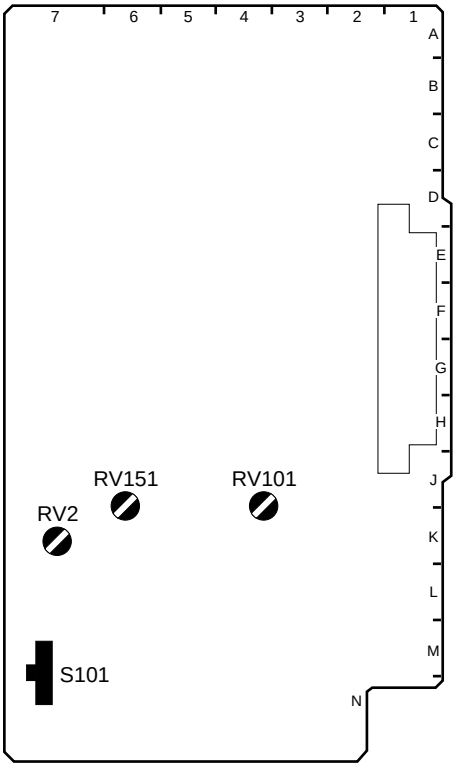
Adjustment procedure

1. Connect the output of audio oscillator (SG-5010) to the AUDIO IN CH-3 connector of CA-701.
   Test point : AUDIO IN CH-3 connector
   Specification : 1 kHz, +4.0 dBu

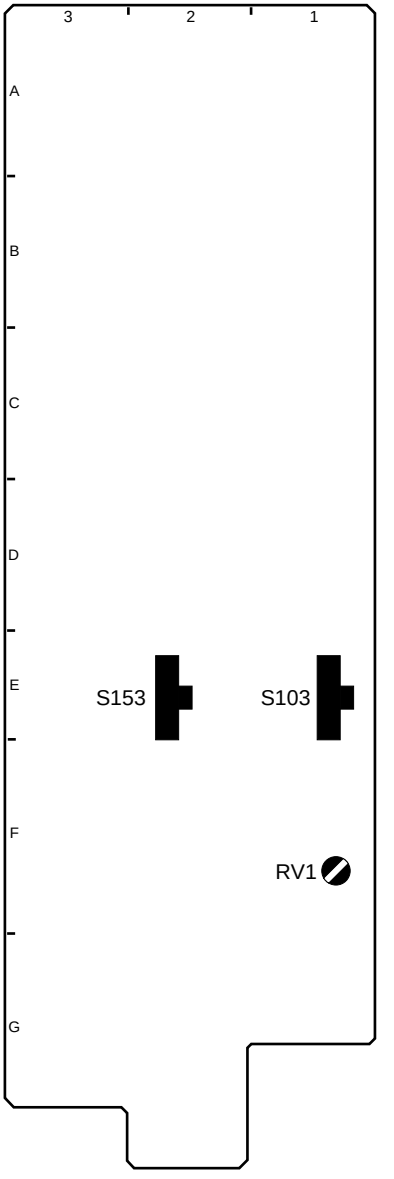
2. Equipment : Audio analyzer
   Test point : AUDIO OUT connector
   Adjustment point : ⊘ RV1 (F-3)/AD-119 board
   Specification : 0 ±0.2 dBm (600 Ω)

Setting after adjustment

- Reset switches to the former settings.



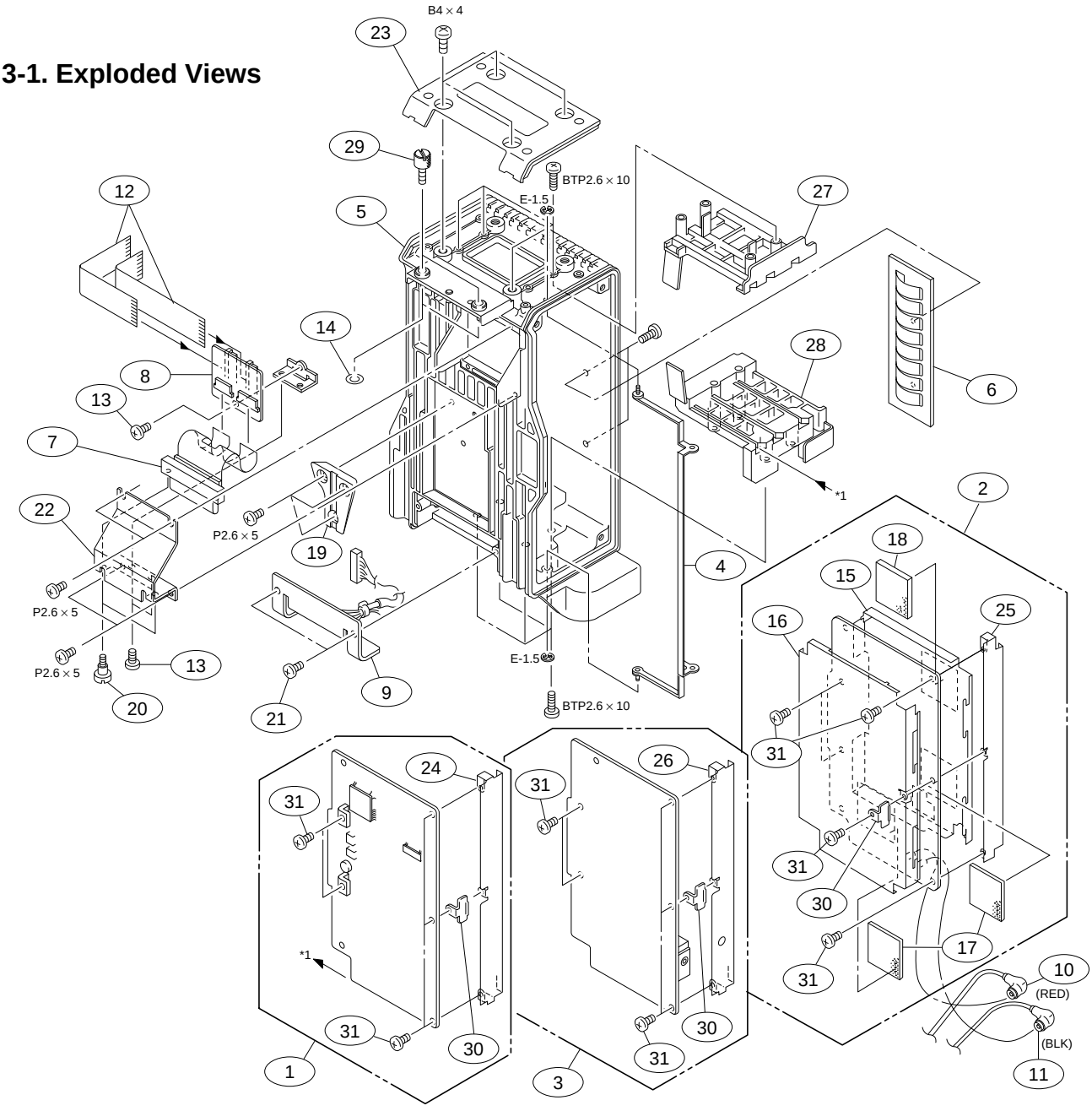
DA-98 Board (A side)



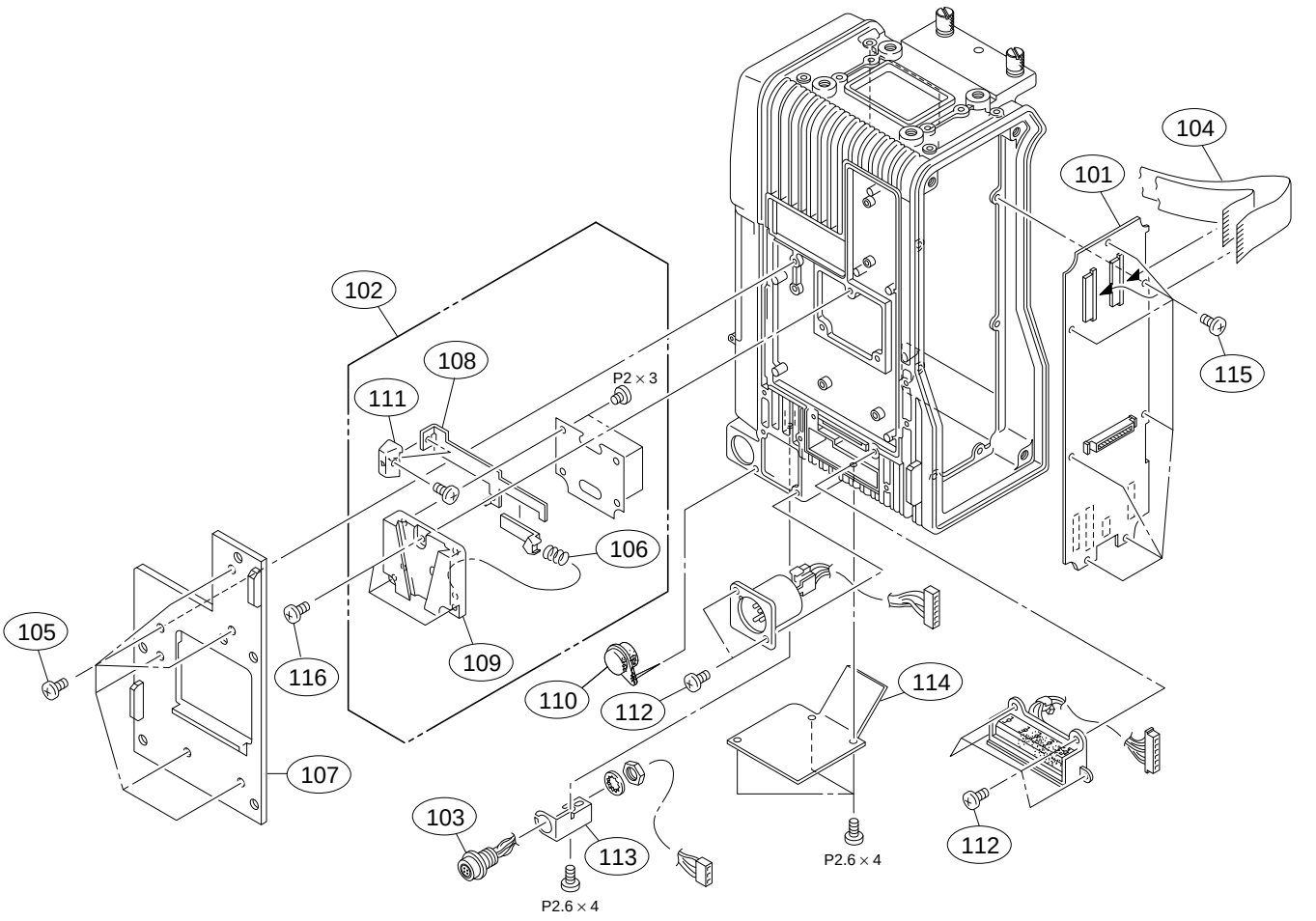
AD-119 Board (B side)

Section 3
Spare Parts

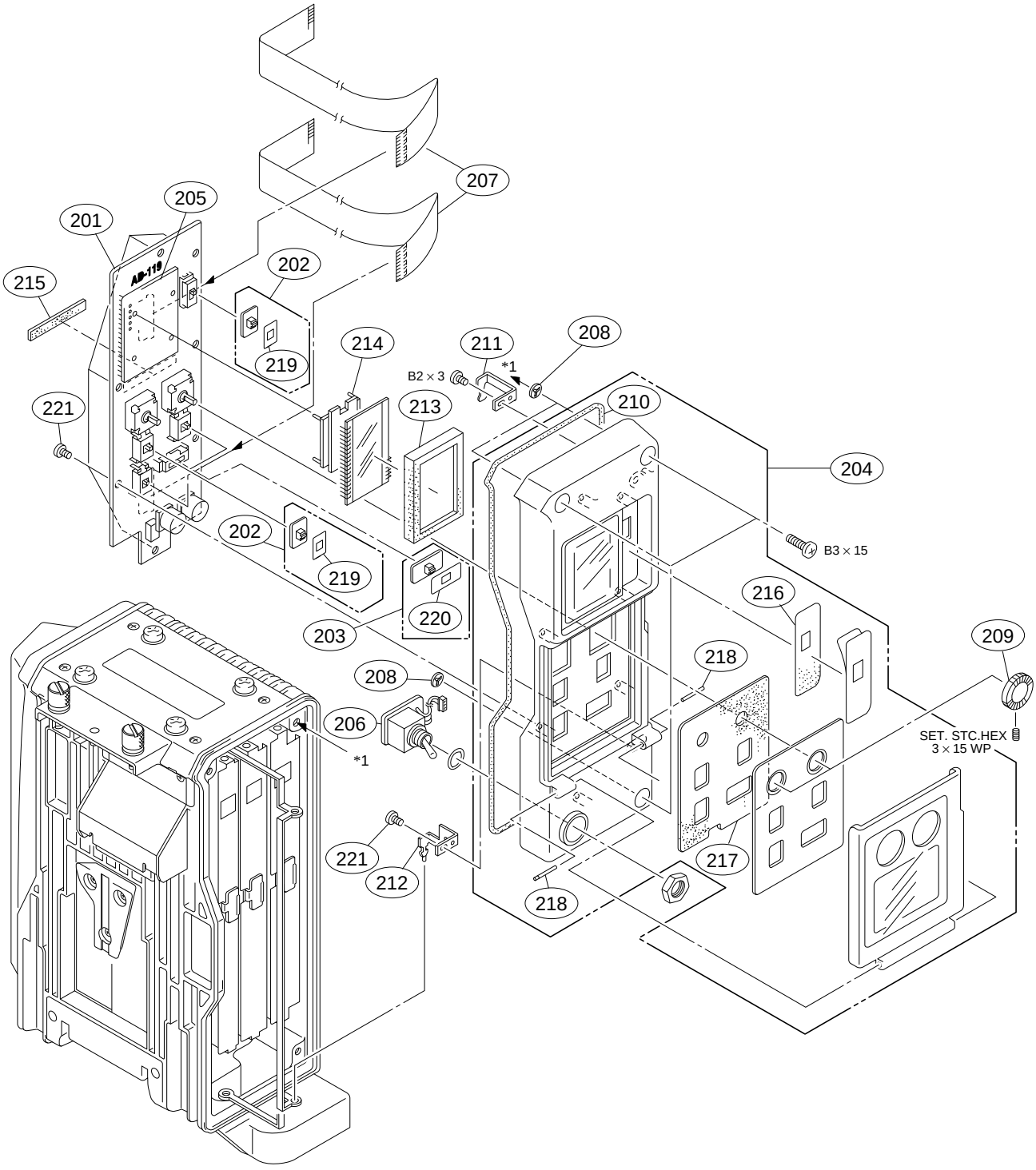
3-1. Exploded Views



No.	Part No.	SP	Description
1	A-8272-689-A	o	MOUNTED CIRCUIT BOARD, DA-98
2	A-8272-697-A	o	MOUNTED CIRCUIT BOARD, DIF-41
3	A-8272-699-A	o	MOUNTED CIRCUIT BOARD, RE-123
4	X-3678-500-1	o	FRAME ASSY,HINGE
5	X-3678-501-1	o	CHASSIS SUB ASSY,MAIN
6	X-3678-521-1	o	FINGER ASSY,SHIELD
7	1-656-062-11	o	PRINTED CIRCUIT BOARD, CN-1176
8	1-659-724-11	o	PRINTED CIRCUIT BOARD, HN-225
9	1-774-841-11	s	CONNECTOR, BATTERY
10	1-776-444-11	s	CABLE, COAXIAL 150MM
11	1-776-444-21	s	CABLE, COAXIAL 150MM
12	1-776-445-11	s	WIRE, FLEXIBLE CARD 20P
13	3-370-749-01	s	SCREW (M2X0.4), PRECISION
14	3-601-846-01	s	RING O
15	3-601-849-01	o	PLATE(1),SHIELD
16	3-601-850-01	o	PLATE(2),SHIELD
17	3-601-851-01	o	RUBBER(1),VENTILATION
18	3-601-852-01	o	RUBBER(2),VENTILATION
19	3-686-350-01	o	SHUE(3)
20	3-686-367-01	s	SCREW,STEP
21	3-694-181-01	s	TYPE1,AROCK PRECISION +P2.6
22	3-695-260-01	o	BRACKET,40PIN
23	3-695-276-02	o	LID(TOP)
24	3-695-278-02	o	PLATE(DA),ORNAMENTAL
25	3-695-279-02	o	PLATE(DIF),ORNAMENTAL
26	3-695-280-02	o	PLATE(RE),ORNAMENTAL
27	3-695-282-01	o	GUIDE(UPPER),PCB
28	3-695-861-01	o	GUIDE (LOWER),PCB
29	3-717-914-01	s	SCREW, DOCKING
30	3-724-753-01	o	RING
31	3-729-061-01	s	SCREW (M2X4.5) (TYPE 1)

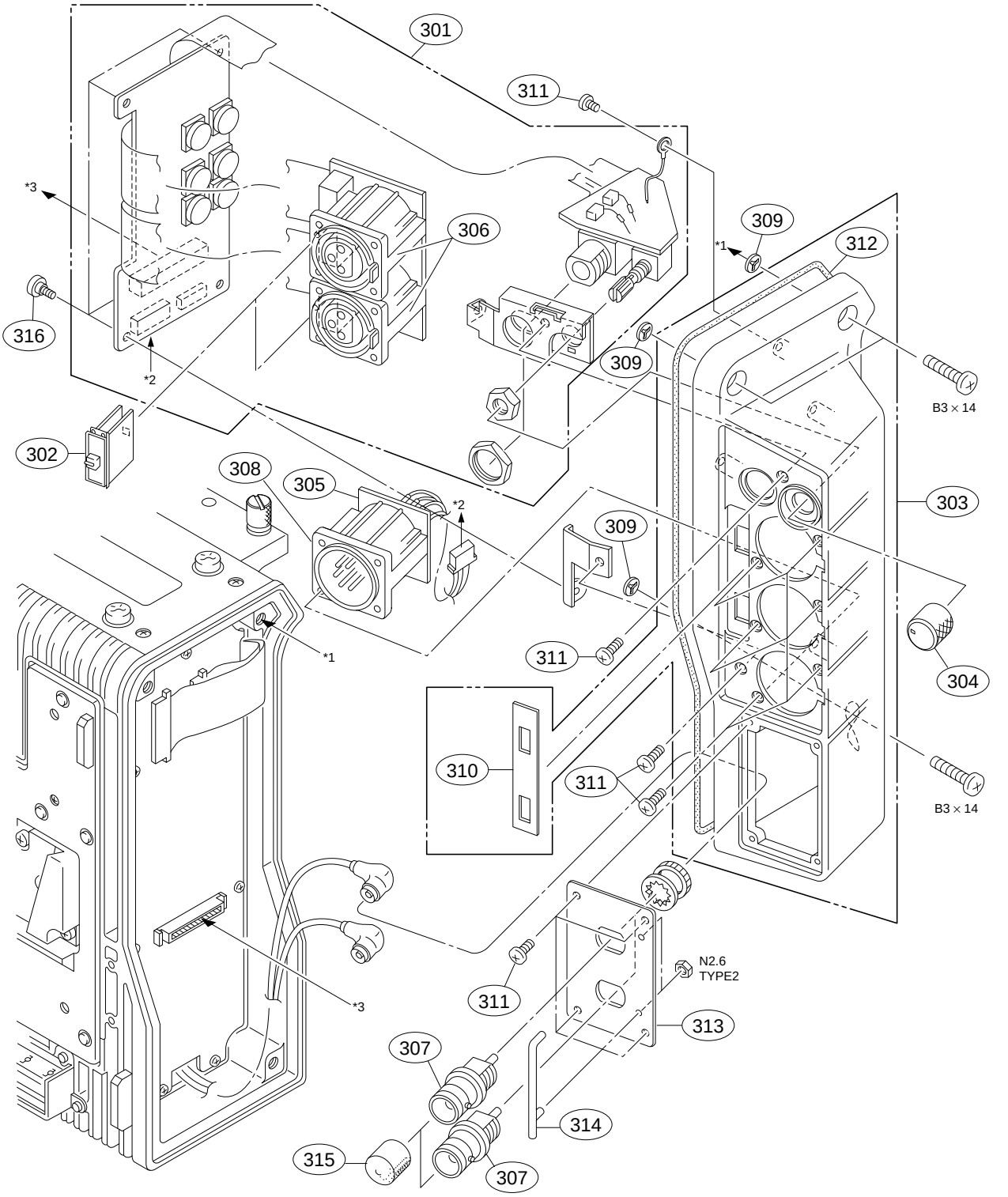


No.	Part No.	SP	Description
101	A-8272-691-A	o	MOUNTED CIRCUIT BOARD, MB-651
102	A-8278-025-C	s	MOUNT,V ASSY
103	1-565-072-11	s	CONNECTOR, CIRCULAR 4P, FEMALE
104	1-776-445-11	s	WIRE, FLEXIBLE CARD 20P
105	3-370-749-01	s	SCREW (M2X0.4), PRECISION
106	3-679-648-02	o	SPRING,COMPRESSION
107	3-679-669-05	o	SPACER
108	3-679-688-02	o	LEVER,RELEASE
109	3-679-690-02	o	MOUNT,V
110	3-680-269-01	s	RUBBUR(DO),DROP PROTECTION
111	3-680-952-01	o	KNOB,RELEASE LEVER
112	3-694-181-01	s	TYPE1,AROCK PRECISION +P2.6
113	3-695-267-01	o	BRACKET,DC-OUT
114	3-695-273-01	o	LID (BOTTOM)
115	3-729-076-01	s	SCREW (+B) (2X3)
116	3-742-074-01	s	SCREW (3X6)



No.	Part No.	SP	Description
201	A-8272-687-A	o	MOUNTED CIRCUIT BOARD, AD-119
202	X-3678-125-1	s	KNOB(2 POSI) ASSY,SW
203	X-3678-126-1	s	KNOB(3 POSI) ASSY,SW
204	X-3678-504-3	o	PANEL SUB ASSY,INSIDE
205	1-659-725-11	o	PRINTED CIRCUIT BOARD, DP-234
206	1-659-733-11	o	PRINTED CIRCUIT BOARD, SW-819
207	1-776-446-11	s	WIRE, FLEXIBLE CARD 20P
208	3-669-596-01	s	WASHER (2.3), STOPPER
209	3-680-219-02	s	KNOB,VR
210	3-190-628-01	s	TUBE,SHIELD (2 m)
211	3-695-258-01	o	HINGE(UPPER)
212	3-695-259-01	o	HINGE(UNDER)
213	3-695-270-01	s	RUBBER,LCD
214	3-695-271-01	o	SPACER,LCD
215	3-695-277-01	o	SPACER,RUBBER
216	3-695-281-01	s	RUBBER(LIGHT),DROP PROTECTION
217	3-695-283-01	s	RUBBER(SW),DROP PROTECTION
218	3-703-357-06	s	PIN, PARALLEL (DIA. 1.6X14)
219	3-717-902-21	o	PLATE, ORNAMENTAL
220	3-717-902-31	o	PLATE, ORNAMENTAL
221	3-729-076-01	s	SCREW (+B) (2X3)

OUTSIDE PANEL



No.	Part No.	SP	Description
301	A-8272-700-A	o	MOUNTED CIRCUIT BOARD, CN-1233 [for SY]
	A-8272-708-A	o	MOUNTED CIRCUIT BOARD, CN-1233A [for J]
302	X-3678-131-1	s	KNOB(M)ASSY,SW
303	X-3678-503-1	o	PANEL SUB ASSY(SY),OUTSIDE [for SY]
	X-3678-505-1	o	PANEL SUB ASSY(J),OUTSIDE [for J]
304	X-3682-814-0	s	KNOB ASSY, CONTROL
305	1-659-734-11	o	PRINTED CIRCUIT BOARD, CN-1339
306	1-766-386-11	s	CONNECTOR, XLR 3P, FEMALE [for SY]
	1-766-385-12	s	CONNECTOR, XLR 3P, MALE [for J]
307	1-774-157-11	s	CONVERTER, COAXIAL CONNECTOR
308	1-774-795-11	s	CONNECTOR, XLR 5P, MALE
309	3-669-596-01	s	WASHER (2.3), STOPPER
310	3-680-265-01	o	PLATE ORNAMENTAL AUDIO(I/P,UC) [for SY]
	3-680-251-01	o	PLATE ORNAMENTAL AUDIO(I/P) [for J]
311	3-694-181-01	s	TYPE1,AROCK PRECISION +P2.6
312	3-190-628-01	s	TUBE,SHIELD (2 m)
313	3-695-261-01	o	BRACKET,BNC
314	3-695-275-01	o	GUARD, CN
315	3-717-823-01	s	COVER, BNC
316	3-732-791-01	s	SCREW (M2X3)

3-2. Electrical Parts List

AD-119 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-8272-687-A	o	MOUNTED CIRCUIT BOARD, AD-119
1pc	3-695-277-01	o	SPACER,RUBBER
C1	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C2	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C3	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C101	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C102	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C103	1-135-227-11	s	TANTALUM, CHIP 100uF 20% 6.3V
C104	1-135-227-11	s	TANTALUM, CHIP 100uF 20% 6.3V
C105	1-162-921-11	s	CERAMIC, CHIP 33PF 5% 50V
C106	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C107	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C108	1-135-216-11	s	TANTALUM, CHIP 10uF 20% 10V
C109	1-135-166-21	s	TANTALUM, CHIP 47uF 10% 10V
C110	1-162-923-11	s	CERAMIC, CHIP 47PF 5% 50V
C111	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C112	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C113	1-135-259-11	s	TANTALUM, CHIP 10uF 20% 6.3V
C114	1-135-210-11	s	TANTALUM, CHIP 4.7uF 20% 10V
C115	1-135-259-11	s	TANTALUM, CHIP 10uF 20% 6.3V
C116	1-135-166-21	s	TANTALUM, CHIP 47uF 10% 10V
C151	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C152	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C153	1-135-227-11	s	TANTALUM, CHIP 100uF 20% 6.3V
C154	1-135-227-11	s	TANTALUM, CHIP 100uF 20% 6.3V
C155	1-162-921-11	s	CERAMIC, CHIP 33PF 5% 50V
C156	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C157	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C158	1-135-216-11	s	TANTALUM, CHIP 10uF 20% 10V
C159	1-135-166-21	s	TANTALUM, CHIP 47uF 10% 10V
C160	1-162-923-11	s	CERAMIC, CHIP 47PF 5% 50V
C161	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C162	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C163	1-135-259-11	s	TANTALUM, CHIP 10uF 20% 6.3V
C164	1-135-210-11	s	TANTALUM, CHIP 4.7uF 20% 10V
C165	1-135-259-11	s	TANTALUM, CHIP 10uF 20% 6.3V
C166	1-135-166-21	s	TANTALUM, CHIP 47uF 10% 10V
C200	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C201	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C202	1-104-553-11	s	FILM, CHIP 0.015uF 5% 16V
C203	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C204	1-162-915-11	s	CERAMIC, CHIP 10PF 50V
C205	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C206	1-162-964-11	s	CERAMIC, CHIP 0.001uF 10% 50V
C207	1-162-964-11	s	CERAMIC, CHIP 0.001uF 10% 50V
C208	1-162-964-11	s	CERAMIC, CHIP 0.001uF 10% 50V
C209	1-162-970-11	s	CERAMIC, CHIP 0.01uF 10% 25V
C210	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C211	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C212	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C213	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C214	1-104-851-11	s	TANTALUM, CHIP 10uF 20% 10V
C215	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C216	1-104-851-11	s	TANTALUM, CHIP 10uF 20% 10V
C217	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C218	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C219	1-162-970-11	s	CERAMIC, CHIP 0.01uF 10% 25V
C251	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V

(AD-119 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C252	1-104-553-11	s	FILM, CHIP 0.015uF 5% 16V
C253	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C254	1-162-915-11	s	CERAMIC, CHIP 10PF 50V
C255	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C256	1-162-964-11	s	CERAMIC, CHIP 0.001uF 10% 50V
C257	1-162-964-11	s	CERAMIC, CHIP 0.001uF 10% 50V
C258	1-162-964-11	s	CERAMIC, CHIP 0.001uF 10% 50V
C259	1-162-970-11	s	CERAMIC, CHIP 0.01uF 10% 25V
C304	1-128-401-11	s	ELECT 100uF 20% 25V
C305	1-128-401-11	s	ELECT 100uF 20% 25V
C306	1-135-166-21	s	TANTALUM, CHIP 47uF 10% 10V
C307	1-135-166-21	s	TANTALUM, CHIP 47uF 10% 10V
CN1	1-569-531-11	s	HOUSING, 20P
CN2	1-569-531-11	s	HOUSING, 20P
CN3	1-691-550-11	s	CONNECTOR, 1.5MM SMD 3P, MALE
D101	8-719-800-76	s	DIODE 1SS226
D151	8-719-800-76	s	DIODE 1SS226
D201	8-719-800-76	s	DIODE 1SS226
IC1	8-759-908-16	s	IC TL072CPS
IC2	8-759-939-41	s	IC S-81230AG-RB
IC101	8-759-700-84	s	IC NJM2041M-D
IC102	8-759-700-84	s	IC NJM2041M-D
IC104	8-759-908-16	s	IC TL072CPS
IC106	8-759-603-27	s	IC M5201FP
IC151	8-759-700-84	s	IC NJM2041M-D
IC152	8-759-700-84	s	IC NJM2041M-D
IC154	8-759-908-16	s	IC TL072CPS
IC156	8-759-603-27	s	IC M5201FP
IC201	8-759-700-84	s	IC NJM2041M-D
IC202	8-759-700-84	s	IC NJM2041M-D
IC203	8-759-357-90	s	IC AK5339-VS
IC204	8-759-080-03	s	IC TC74VHCT541FS(EL)
IC205	8-759-196-97	s	IC TC7SH32FU-TE85R
L301	1-410-389-31	s	INDUCTOR CHIP 47UH
L302	1-410-389-31	s	INDUCTOR CHIP 47UH
L303	1-410-389-31	s	INDUCTOR CHIP 47UH
Q1	8-729-230-63	s	TRANSISTOR 2SC4116YG
Q101	8-729-014-86	s	TRANSISTOR 2SC4207-YGRTE85L
Q102	8-729-230-63	s	TRANSISTOR 2SC4116YG
Q103	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q104	8-729-230-63	s	TRANSISTOR 2SC4116YG
Q105	8-729-230-63	s	TRANSISTOR 2SC4116YG
Q106	8-729-230-63	s	TRANSISTOR 2SC4116YG
Q107	8-729-230-63	s	TRANSISTOR 2SC4116YG
Q151	8-729-014-86	s	TRANSISTOR 2SC4207-YGRTE85L
Q152	8-729-230-63	s	TRANSISTOR 2SC4116YG
Q153	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q154	8-729-230-63	s	TRANSISTOR 2SC4116YG
Q155	8-729-230-63	s	TRANSISTOR 2SC4116YG
Q156	8-729-230-63	s	TRANSISTOR 2SC4116YG
Q157	8-729-230-63	s	TRANSISTOR 2SC4116YG
Q200	8-729-028-91	s	TRANSISTOR DTA144EUA-T106
Q201	8-729-117-32	s	TRANSISTOR 2SC4177
Q202	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q203	8-729-209-07	s	TRANSISTOR 2SC4213-B
Q204	8-729-209-07	s	TRANSISTOR 2SC4213-B
Q251	8-729-117-32	s	TRANSISTOR 2SC4177

(AD-119 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
Q252	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q253	8-729-209-07	s	TRANSISTOR 2SC4213-B
Q254	8-729-209-07	s	TRANSISTOR 2SC4213-B
Q302	8-729-144-56	s	TRANSISTOR 2SC3617
Q303	8-729-020-94	s	TRANSISTOR 2SA1314C-TE12L
R1	1-216-837-11	s	METAL, CHIP 22K 5% 1/16W
R2	1-216-840-11	s	METAL, CHIP 39K 5% 1/16W
R3	1-216-846-11	s	METAL, CHIP 120K 5% 1/16W
R4	1-216-850-11	s	METAL, CHIP 270K 5% 1/16W
R101	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R102	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R103	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R104	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R105	1-218-706-11	s	METAL, CHIP 3.9K 0.5% 1/16W
R106	1-218-851-11	s	METAL, CHIP 1.5K 0.5% 1/16W
R107	1-216-821-11	s	METAL, CHIP 1K 5% 1/16W
R108	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R109	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R110	1-218-684-11	s	METAL, CHIP 470 0.5% 1/16W
R111	1-218-723-11	s	METAL, CHIP 20K 0.5% 1/16W
R112	1-216-829-11	s	METAL, CHIP 4.7K 5% 1/16W
R113	1-216-801-11	s	METAL, CHIP 22 5% 1/16W
R114	1-218-684-11	s	METAL, CHIP 470 0.5% 1/16W
R115	1-218-723-11	s	METAL, CHIP 20K 0.5% 1/16W
R116	1-216-829-11	s	METAL, CHIP 4.7K 5% 1/16W
R121	1-216-841-11	s	METAL, CHIP 47K 5% 1/16W
R122	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R123	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R124	1-218-723-11	s	METAL, CHIP 20K 0.5% 1/16W
R125	1-218-723-11	s	METAL, CHIP 20K 0.5% 1/16W
R126	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R127	1-218-702-11	s	METAL, CHIP 2.7K 0.5% 1/16W
R128	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R129	1-216-849-11	s	METAL, CHIP 220K 5% 1/16W
R130	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R131	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R132	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R133	1-216-817-11	s	METAL, CHIP 470 5% 1/16W
R134	1-216-829-11	s	METAL, CHIP 4.7K 5% 1/16W
R135	1-216-809-11	s	METAL, CHIP 100 5% 1/16W
R151	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R152	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R153	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R154	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R155	1-218-706-11	s	METAL, CHIP 3.9K 0.5% 1/16W
R156	1-218-851-11	s	METAL, CHIP 1.5K 0.5% 1/16W
R157	1-216-821-11	s	METAL, CHIP 1K 5% 1/16W
R158	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R159	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R160	1-218-684-11	s	METAL, CHIP 470 0.5% 1/16W
R161	1-218-723-11	s	METAL, CHIP 20K 0.5% 1/16W
R162	1-216-829-11	s	METAL, CHIP 4.7K 5% 1/16W
R163	1-216-801-11	s	METAL, CHIP 22 5% 1/16W
R164	1-218-723-11	s	METAL, CHIP 20K 0.5% 1/16W
R165	1-218-684-11	s	METAL, CHIP 470 0.5% 1/16W
R166	1-216-829-11	s	METAL, CHIP 4.7K 5% 1/16W
R171	1-216-841-11	s	METAL, CHIP 47K 5% 1/16W
R172	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R173	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W

(AD-119 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R174	1-218-723-11	s	METAL, CHIP 20K 0.5% 1/16W
R175	1-218-723-11	s	METAL, CHIP 20K 0.5% 1/16W
R176	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R177	1-218-702-11	s	METAL, CHIP 2.7K 0.5% 1/16W
R178	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R179	1-216-849-11	s	METAL, CHIP 220K 5% 1/16W
R180	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R181	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R182	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R183	1-216-817-11	s	METAL, CHIP 470 5% 1/16W
R184	1-216-829-11	s	METAL, CHIP 4.7K 5% 1/16W
R185	1-216-809-11	s	METAL, CHIP 100 5% 1/16W
R201	1-216-831-11	s	METAL, CHIP 6.8K 5% 1/16W
R202	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R203	1-216-845-11	s	METAL, CHIP 100K 5% 1/16W
R204	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R205	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R206	1-216-845-11	s	METAL, CHIP 100K 5% 1/16W
R207	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R208	1-216-845-11	s	METAL, CHIP 100K 5% 1/16W
R209	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R210	1-218-692-11	s	METAL, CHIP 1K 0.5% 1/16W
R211	1-216-857-11	s	METAL, CHIP 1M 5% 1/16W
R212	1-218-856-11	s	METAL, CHIP 2.4K 0.5% 1/16W
R213	1-218-738-11	s	METAL, CHIP 82K 0.5% 1/16W
R214	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R215	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R216	1-218-661-11	s	METAL, CHIP 51 0.5% 1/16W
R217	1-218-672-11	s	METAL, CHIP 150 0.5% 1/16W
R218	1-218-672-11	s	METAL, CHIP 150 0.5% 1/16W
R219	1-218-672-11	s	METAL, CHIP 150 0.5% 1/16W
R220	1-216-849-11	s	METAL, CHIP 220K 5% 1/16W
R221	1-218-692-11	s	METAL, CHIP 1K 0.5% 1/16W
R251	1-216-831-11	s	METAL, CHIP 6.8K 5% 1/16W
R252	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R253	1-216-845-11	s	METAL, CHIP 100K 5% 1/16W
R254	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R255	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R256	1-216-845-11	s	METAL, CHIP 100K 5% 1/16W
R257	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R259	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R260	1-218-692-11	s	METAL, CHIP 1K 0.5% 1/16W
R261	1-216-857-11	s	METAL, CHIP 1M 5% 1/16W
R262	1-218-856-11	s	METAL, CHIP 2.4K 0.5% 1/16W
R263	1-218-738-11	s	METAL, CHIP 82K 0.5% 1/16W
R264	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R265	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R266	1-218-661-11	s	METAL, CHIP 51 0.5% 1/16W
R301	1-216-841-11	s	METAL, CHIP 47K 5% 1/16W
R302	1-216-841-11	s	METAL, CHIP 47K 5% 1/16W
R304	1-216-813-11	s	METAL, CHIP 220 5% 1/16W
R305	1-216-813-11	s	METAL, CHIP 220 5% 1/16W
RB201	1-239-444-11	s	NETWORK RESISTOR (CHIP) 220K
RB202	1-239-444-11	s	NETWORK RESISTOR (CHIP) 220K
RV1	1-237-039-11	s	RES, ADJ METAL 100K
RV101	1-223-684-11	s	RES, VAR, CARBON 5K
RV151	1-223-684-11	s	RES, VAR, CARBON 5K

(AD-119 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
S103	1-571-277-31	s	SWITCH, SLIDE
S104	1-570-842-11	s	SWITCH, SLIDE
S153	1-571-277-31	s	SWITCH, SLIDE
S154	1-570-842-11	s	SWITCH, SLIDE
S301	1-570-860-11	s	SWITCH, SLIDE
S302	1-570-860-11	s	SWITCH, SLIDE
S303	1-570-852-11	s	SWITCH, SLIDE

CN-1176 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-656-062-11	o	PRINTED CIRCUIT BOARD, CN-1176
CN1	1-766-437-11	s	CONNECTOR, BOARD TO BOARD 40P

CN-1233/1233A BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-8272-700-A	o	MOUNTED CIRCUIT BOARD, CN-1233 [for SY]
	A-8272-708-A	o	MOUNTED CIRCUIT BOARD, CN-1233A [for J]
C1	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C2	1-128-391-11	s	ELECT 330uF 20% 6.3V
C3	1-126-392-11	s	ELECT, CHIP 100uF 20% 6.3V
C4	1-128-391-11	s	ELECT 330uF 20% 6.3V
C5	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C101	1-162-927-11	s	CERAMIC, CHIP 100PF 5% 50V [for J]
C102	1-162-927-11	s	CERAMIC, CHIP 100PF 5% 50V [for SY]
C103	1-162-927-11	s	CERAMIC, CHIP 100PF 5% 50V
C104	1-162-964-11	s	CERAMIC, CHIP 0.001uF 10% 50V
C105	1-164-315-11	s	CERAMIC, CHIP 470PF 5% 50V
C106	1-164-315-11	s	CERAMIC, CHIP 470PF 5% 50V
C107	1-126-405-11	s	ELECT, CHIP 10uF 20% 50V
C108	1-126-405-11	s	ELECT, CHIP 10uF 20% 50V
C109	1-126-405-11	s	ELECT, CHIP 10uF 20% 50V
C110	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C111	1-162-915-11	s	CERAMIC, CHIP 10PF 50V
C112	1-162-915-11	s	CERAMIC, CHIP 10PF 50V
C113	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C151	1-162-927-11	s	CERAMIC, CHIP 100PF 5% 50V [for J]
C152	1-162-927-11	s	CERAMIC, CHIP 100PF 5% 50V [for SY]
C153	1-162-927-11	s	CERAMIC, CHIP 100PF 5% 50V
C154	1-162-964-11	s	CERAMIC, CHIP 0.001uF 10% 50V
C155	1-164-315-11	s	CERAMIC, CHIP 470PF 5% 50V
C156	1-164-315-11	s	CERAMIC, CHIP 470PF 5% 50V
C157	1-126-405-11	s	ELECT, CHIP 10uF 20% 50V
C158	1-126-405-11	s	ELECT, CHIP 10uF 20% 50V
C159	1-126-405-11	s	ELECT, CHIP 10uF 20% 50V
C160	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C161	1-162-915-11	s	CERAMIC, CHIP 10PF 50V
C162	1-162-915-11	s	CERAMIC, CHIP 10PF 50V
C163	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C201	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C202	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C203	1-135-227-11	s	TANTALUM, CHIP 100uF 20% 6.3V
C204	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C205	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C206	1-162-915-11	s	CERAMIC, CHIP 10PF 50V
C207	1-162-915-11	s	CERAMIC, CHIP 10PF 50V
C208	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C209	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C210	1-128-394-11	s	ELECT 220uF 20% 10V
C211	1-128-394-11	s	ELECT 220uF 20% 10V
C212	1-128-394-11	s	ELECT 220uF 20% 10V
C213	1-128-394-11	s	ELECT 220uF 20% 10V
C214	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C215	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C251	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C252	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C253	1-135-227-11	s	TANTALUM, CHIP 100uF 20% 6.3V
C254	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C255	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C256	1-162-915-11	s	CERAMIC, CHIP 10PF 50V
C257	1-162-915-11	s	CERAMIC, CHIP 10PF 50V
C258	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V

(CN-1233/1233A BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C259	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C260	1-128-394-11	s	ELECT 220uF 20% 10V
C261	1-128-394-11	s	ELECT 220uF 20% 10V
C262	1-128-394-11	s	ELECT 220uF 20% 10V
C263	1-128-394-11	s	ELECT 220uF 20% 10V
C264	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C265	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C301	1-162-923-11	s	CERAMIC, CHIP 47PF 5% 50V
C303	1-162-923-11	s	CERAMIC, CHIP 47PF 5% 50V
C304	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C305	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C306	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C307	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C351	1-162-923-11	s	CERAMIC, CHIP 47PF 5% 50V
C353	1-162-923-11	s	CERAMIC, CHIP 47PF 5% 50V
C354	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C355	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
CN2	1-569-775-21	s	CONNECTOR, 5P, MALE
CN3	1-564-198-11	s	CONNECTOR, ILS 5P, MALE
CN101	1-766-386-11	s	CONNECTOR, XLR 3P, FEMALE [for SY]
	1-766-385-12	s	CONNECTOR, XLR 3P, MALE [for J]
CN151	1-766-386-11	s	CONNECTOR, XLR 3P, FEMALE [for SY]
	1-766-385-12	s	CONNECTOR, XLR 3P, MALE [for J]
D1	8-719-941-86	s	DIODE DAN202U
D101	8-719-800-76	s	DIODE 1SS226
D102	8-719-800-76	s	DIODE 1SS226
D151	8-719-800-76	s	DIODE 1SS226
D152	8-719-800-76	s	DIODE 1SS226
D201	8-719-800-76	s	DIODE 1SS226
D202	8-719-800-76	s	DIODE 1SS226
D251	8-719-800-76	s	DIODE 1SS226
D252	8-719-800-76	s	DIODE 1SS226
FL201	1-239-895-11	s	FILTER, EMI (SMD)
FL202	1-239-895-11	s	FILTER, EMI (SMD)
FL251	1-239-895-11	s	FILTER, EMI (SMD)
FL252	1-239-895-11	s	FILTER, EMI (SMD)
FL301	1-239-895-11	s	FILTER, EMI (SMD)
FL302	1-239-895-11	s	FILTER, EMI (SMD)
IC101	8-759-700-84	s	IC NJM2041M-D
IC151	8-759-700-84	s	IC NJM2041M-D
IC201	8-759-700-84	s	IC NJM2041M-D
IC202	8-759-603-27	s	IC M5201FP
IC203	8-759-700-84	s	IC NJM2041M-D
IC204	8-759-700-94	s	IC NJM5532M
IC251	8-759-700-84	s	IC NJM2041M-D
IC252	8-759-603-27	s	IC M5201FP
IC253	8-759-700-84	s	IC NJM2041M-D
IC254	8-759-700-94	s	IC NJM5532M
IC301	8-759-700-84	s	IC NJM2041M-D
IC302	8-759-700-94	s	IC NJM5532M
IC351	8-759-700-84	s	IC NJM2041M-D
J301	1-507-863-51	s	JACK, PHONE
L101	1-412-137-11	s	INDUCTOR 10UH
L102	1-412-137-11	s	INDUCTOR 10UH
L151	1-412-137-11	s	INDUCTOR 10UH

(CN-1233/1233A BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
L152	1-412-137-11	s	INDUCTOR 10UH
Q1	8-729-020-93	s	TRANSISTOR 2SC2982C-TE12L
Q2	8-729-020-94	s	TRANSISTOR 2SA1314C-TE12L
Q101	8-729-271-31	s	TRANSISTOR 2SC2713G [for SY]
Q151	8-729-271-31	s	TRANSISTOR 2SC2713G [for SY]
Q201	8-729-209-07	s	TRANSISTOR 2SC4213-B
Q202	8-729-209-07	s	TRANSISTOR 2SC4213-B
Q251	8-729-209-07	s	TRANSISTOR 2SC4213-B
Q252	8-729-209-07	s	TRANSISTOR 2SC4213-B
Q300	8-729-028-91	s	TRANSISTOR DTA144EUA-T106
Q301	8-729-209-07	s	TRANSISTOR 2SC4213-B
Q302	8-729-209-07	s	TRANSISTOR 2SC4213-B
R1	1-218-698-11	s	METAL, CHIP 1.8K 0.5% 1/16W
R2	1-218-698-11	s	METAL, CHIP 1.8K 0.5% 1/16W
R101	1-216-864-11	s	METAL, CHIP 0 5% 1/16W [for SY]
R102	1-216-864-11	s	METAL, CHIP 0 5% 1/16W [for J]
R103	1-216-864-11	s	METAL, CHIP 0 5% 1/16W [for SY]
R104	1-216-864-11	s	METAL, CHIP 0 5% 1/16W [for J]
R105	1-218-881-11	s	METAL, CHIP 27K 0.5% 1/16W
R106-111	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R112	1-218-833-11	s	METAL, CHIP 270 0.5% 1/16W
R113	1-218-833-11	s	METAL, CHIP 270 0.5% 1/16W
R114	1-218-680-11	s	METAL, CHIP 330 0.5% 1/16W
R115	1-218-680-11	s	METAL, CHIP 330 0.5% 1/16W
R116	1-216-864-11	s	METAL, CHIP 0 5% 1/16W
R117	1-218-858-11	s	METAL, CHIP 3K 0.5% 1/16W
R118	1-218-740-11	s	METAL, CHIP 100K 0.5% 1/16W
R119	1-218-740-11	s	METAL, CHIP 100K 0.5% 1/16W
R120	1-218-837-11	s	METAL, CHIP 390 0.5% 1/16W
R121	1-218-688-11	s	METAL, CHIP 680 0.5% 1/16W
R122	1-218-708-11	s	METAL, CHIP 4.7K 0.5% 1/16W
R123	1-218-708-11	s	METAL, CHIP 4.7K 0.5% 1/16W
R151	1-216-864-11	s	METAL, CHIP 0 5% 1/16W [for SY]
R152	1-216-864-11	s	METAL, CHIP 0 5% 1/16W [for J]
R153	1-216-864-11	s	METAL, CHIP 0 5% 1/16W [for SY]
R154	1-216-864-11	s	METAL, CHIP 0 5% 1/16W [for J]
R155	1-218-881-11	s	METAL, CHIP 27K 0.5% 1/16W
R156-161	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R162	1-218-833-11	s	METAL, CHIP 270 0.5% 1/16W
R163	1-218-833-11	s	METAL, CHIP 270 0.5% 1/16W
R164	1-216-864-11	s	METAL, CHIP 0 5% 1/16W
R165	1-218-680-11	s	METAL, CHIP 330 0.5% 1/16W
R166	1-218-680-11	s	METAL, CHIP 330 0.5% 1/16W
R167	1-218-858-11	s	METAL, CHIP 3K 0.5% 1/16W
R168	1-218-740-11	s	METAL, CHIP 100K 0.5% 1/16W
R169	1-218-740-11	s	METAL, CHIP 100K 0.5% 1/16W
R170	1-218-837-11	s	METAL, CHIP 390 0.5% 1/16W
R171	1-218-688-11	s	METAL, CHIP 680 0.5% 1/16W
R172	1-218-708-11	s	METAL, CHIP 4.7K 0.5% 1/16W
R173	1-218-708-11	s	METAL, CHIP 4.7K 0.5% 1/16W
R201	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R202	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R203	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R204	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R205	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R206	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R207	1-218-708-11	s	METAL, CHIP 4.7K 0.5% 1/16W

(CN-1233/1233A BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R208	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R209	1-218-732-11	s	METAL, CHIP 47K 0.5% 1/16W
R211-215	1-218-692-11	s	METAL, CHIP 1K 0.5% 1/16W
R216-220	1-218-708-11	s	METAL, CHIP 4.7K 0.5% 1/16W
R221	1-218-870-11	s	METAL, CHIP 9.1K 0.5% 1/16W
R222	1-218-708-11	s	METAL, CHIP 4.7K 0.5% 1/16W
R223	1-218-870-11	s	METAL, CHIP 9.1K 0.5% 1/16W
R224	1-218-660-11	s	METAL, CHIP 47 0.5% 1/16W
R225	1-218-660-11	s	METAL, CHIP 47 0.5% 1/16W
R226	1-218-710-11	s	METAL, CHIP 5.6K 0.5% 1/16W
R227	1-218-710-11	s	METAL, CHIP 5.6K 0.5% 1/16W
R228	1-218-732-11	s	METAL, CHIP 47K 0.5% 1/16W
R229	1-218-732-11	s	METAL, CHIP 47K 0.5% 1/16W
R230	1-218-740-11	s	METAL, CHIP 100K 0.5% 1/16W
R251	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R252	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R253	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R254	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R255	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R256	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R258	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R261-265	1-218-692-11	s	METAL, CHIP 1K 0.5% 1/16W
R266-270	1-218-708-11	s	METAL, CHIP 4.7K 0.5% 1/16W
R271	1-218-870-11	s	METAL, CHIP 9.1K 0.5% 1/16W
R272	1-218-708-11	s	METAL, CHIP 4.7K 0.5% 1/16W
R273	1-218-870-11	s	METAL, CHIP 9.1K 0.5% 1/16W
R274	1-218-660-11	s	METAL, CHIP 47 0.5% 1/16W
R275	1-218-660-11	s	METAL, CHIP 47 0.5% 1/16W
R276	1-218-710-11	s	METAL, CHIP 5.6K 0.5% 1/16W
R277	1-218-710-11	s	METAL, CHIP 5.6K 0.5% 1/16W
R278	1-218-732-11	s	METAL, CHIP 47K 0.5% 1/16W
R279	1-218-732-11	s	METAL, CHIP 47K 0.5% 1/16W
R280	1-218-740-11	s	METAL, CHIP 100K 0.5% 1/16W
R301	1-218-708-11	s	METAL, CHIP 4.7K 0.5% 1/16W
R302	1-218-708-11	s	METAL, CHIP 4.7K 0.5% 1/16W
R303	1-211-969-11	s	METAL, CHIP 10 0.5% 1/16W
R304	1-218-856-11	s	METAL, CHIP 2.4K 0.5% 1/16W
R305	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R306	1-220-220-11	s	METAL, CHIP 120 5% 1/2W
R307	1-218-732-11	s	METAL, CHIP 47K 0.5% 1/16W
R351	1-218-708-11	s	METAL, CHIP 4.7K 0.5% 1/16W
R352	1-218-708-11	s	METAL, CHIP 4.7K 0.5% 1/16W
R353	1-211-969-11	s	METAL, CHIP 10 0.5% 1/16W
R354	1-218-856-11	s	METAL, CHIP 2.4K 0.5% 1/16W
R355	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R356	1-220-220-11	s	METAL, CHIP 120 5% 1/2W
R357	1-218-732-11	s	METAL, CHIP 47K 0.5% 1/16W
RV301	1-241-577-11	s	RES, VAR CARBON 20k/20k
S101	1-572-042-11	s	SWITCH, SLIDE
S151	1-572-042-11	s	SWITCH, SLIDE

CN-1339 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-562-255-00	o	HOUSING, 5P
1pc	1-562-260-11	o	CONTACT, SOCKET
1pc	1-659-734-11	o	PRINTED CIRCUIT BOARD, CN-1339
CN1	1-774-795-11	s	CONNECTOR, XLR 5P, MALE

DA-98 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-8272-689-A	o	MOUNTED CIRCUIT BOARD, DA-98
1pc	3-695-278-02	o	PLATE(DA),ORNAMENTAL
1pc	3-724-753-01	o	RING
5pcs	3-729-061-01	s	SCREW (M2X4.5) (TYPE 1)
C2	1-135-216-11	s	TANTALUM, CHIP 10uF 20% 10V
C3	1-135-216-11	s	TANTALUM, CHIP 10uF 20% 10V
C4	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C6	1-135-216-11	s	TANTALUM, CHIP 10uF 20% 10V
C7	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C8	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C9	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C10	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C13	1-162-970-11	s	CERAMIC, CHIP 0.01uF 10% 25V
C16-25	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C105	1-162-927-11	s	CERAMIC, CHIP 100PF 5% 50V
C107	1-162-927-11	s	CERAMIC, CHIP 100PF 5% 50V
C109	1-162-927-11	s	CERAMIC, CHIP 100PF 5% 50V
C111	1-162-927-11	s	CERAMIC, CHIP 100PF 5% 50V
C113	1-104-546-11	s	FILM, CHIP 0.0039uF 5% 16V
C114	1-104-554-11	s	FILM, CHIP 0.018uF 5% 16V
C115	1-162-957-11	s	CERAMIC, CHIP 220PF 5% 50V
C119	1-162-959-11	s	CERAMIC, CHIP 330PF 5% 50V
C121	1-162-927-11	s	CERAMIC, CHIP 100PF 5% 50V
C123	1-135-227-11	s	TANTALUM, CHIP 100uF 20% 6.3V
C124	1-162-915-11	s	CERAMIC, CHIP 10PF 50V
C125	1-135-216-11	s	TANTALUM, CHIP 10uF 20% 10V
C126	1-162-923-11	s	CERAMIC, CHIP 47PF 5% 50V
C127	1-135-201-11	s	TANTALUM, CHIP 10uF 20% 6.3V
C128	1-135-210-11	s	TANTALUM, CHIP 4.7uF 20% 10V
C129	1-135-166-21	s	TANTALUM, CHIP 47uF 10% 10V
C130	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C131	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C135-142	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C143	1-135-166-21	s	TANTALUM, CHIP 47uF 10% 10V
C155	1-162-927-11	s	CERAMIC, CHIP 100PF 5% 50V
C157	1-162-927-11	s	CERAMIC, CHIP 100PF 5% 50V
C159	1-162-927-11	s	CERAMIC, CHIP 100PF 5% 50V
C161	1-162-927-11	s	CERAMIC, CHIP 100PF 5% 50V
C163	1-104-546-11	s	FILM, CHIP 0.0039uF 5% 16V
C164	1-104-554-11	s	FILM, CHIP 0.018uF 5% 16V
C165	1-162-957-11	s	CERAMIC, CHIP 220PF 5% 50V
C167	1-135-166-21	s	TANTALUM, CHIP 47uF 10% 10V
C169	1-162-959-11	s	CERAMIC, CHIP 330PF 5% 50V
C171	1-162-927-11	s	CERAMIC, CHIP 100PF 5% 50V
C173	1-135-227-11	s	TANTALUM, CHIP 100uF 20% 6.3V
C174	1-162-915-11	s	CERAMIC, CHIP 10PF 50V
C175	1-135-216-11	s	TANTALUM, CHIP 10uF 20% 10V
C176	1-162-923-11	s	CERAMIC, CHIP 47PF 5% 50V
C177	1-135-201-11	s	TANTALUM, CHIP 10uF 20% 6.3V
C178	1-135-210-11	s	TANTALUM, CHIP 4.7uF 20% 10V
C179	1-135-166-21	s	TANTALUM, CHIP 47uF 10% 10V
C180	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C181	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C185-192	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C201	1-135-091-00	s	TANTALUM, CHIP 1.0uF 20% 16V
C202	1-162-915-11	s	CERAMIC, CHIP 10PF 50V
C203	1-162-915-11	s	CERAMIC, CHIP 10PF 50V
C206	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C207	1-135-216-11	s	TANTALUM, CHIP 10uF 20% 10V

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Ref. No. or Q'ty	Part No.	SP	Description
C208	1-135-216-11	s	TANTALUM, CHIP 10uF 20% 10V
C209	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C210	1-135-216-11	s	TANTALUM, CHIP 10uF 20% 10V
C211	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C212	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C213	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C214	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C217	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C218	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C219	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C220	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C222	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C223	1-107-689-21	s	TANTALUM, CHIP 1uF 20% 35V
C301	1-128-400-11	s	ELECT 47uF 20% 25V
C302	1-128-401-11	s	ELECT 100uF 20% 25V
C303	1-128-401-11	s	ELECT 100uF 20% 25V
C304	1-128-394-11	s	ELECT 220uF 20% 10V
C305	1-135-166-21	s	TANTALUM, CHIP 47uF 10% 10V
C306	1-128-394-11	s	ELECT 220uF 20% 10V
C307	1-135-166-21	s	TANTALUM, CHIP 47uF 10% 10V
C308-313	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C314	1-126-394-11	s	ELECT, CHIP 10uF 20% 16V
C315	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C318	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C319	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C320	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C321	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C323	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C324	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C325	1-162-927-11	s	CERAMIC, CHIP 100PF 5% 50V [for SY:10026 and higher] [for J :30006 and higher]
CN1	1-695-453-11	s	CONNECTOR, BOARD TO BOARD 50P
CNI1	1-251-350-11	o	SOCKET, IC (PLCC) 32P
D1	8-719-941-86	s	DIODE DAN202U
D102	8-719-800-76	s	DIODE 1SS226
D151	8-719-800-76	s	DIODE 1SS226
D202	8-719-800-76	s	DIODE 1SS226
D203	8-719-941-86	s	DIODE DAN202U
D204	8-719-800-76	s	DIODE 1SS226
D301	8-719-800-76	s	DIODE 1SS226
D302	8-719-210-33	s	DIODE EC10DS2
D303	8-719-941-86	s	DIODE DAN202U
D304	8-719-941-86	s	DIODE DAN202U
IC1	8-759-080-03	s	IC TC74VHCT541FS(EL)
IC2	8-759-271-86	s	IC TC7SH04FU
IC3	8-759-700-84	s	IC NJM2041M-D
IC4	8-759-939-41	s	IC S-81230AG-RB
IC5	8-759-079-61	s	IC TC74VHC74FS(EL)
IC6	8-759-082-61	s	IC TC4W53FU
IC101	8-759-197-12	s	IC AK4318-VS-E1
IC102	8-759-700-84	s	IC NJM2041M-D
IC103	8-759-700-84	s	IC NJM2041M-D
IC107	8-759-603-27	s	IC M5201FP
IC108	8-759-700-84	s	IC NJM2041M-D
IC109	8-759-908-16	s	IC TL072CPS
IC110	8-759-700-84	s	IC NJM2041M-D
IC152	8-759-700-84	s	IC NJM2041M-D

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Ref. No. or Q'ty	Part No.	SP	Description
IC153	8-759-700-84	s	IC NJM2041M-D
IC157	8-759-603-27	s	IC M5201FP
IC158	8-759-700-84	s	IC NJM2041M-D
IC159	8-759-908-16	s	IC TL072CPS
IC160	8-759-700-84	s	IC NJM2041M-D
IC201	8-759-192-26	s	IC HD6435348RA00F
IC204	8-759-080-03	s	IC TC74VHCT541FS(EL)
IC208	8-759-940-45	s	IC S-8054HN-CB
IC209	8-759-277-63	s	IC TC7W14FU(TE12R)
IC210	8-759-082-58	s	IC TC7W08FU
IC211	8-759-196-97	s	IC TC7SH32FU-TE85R
IC212	8-759-245-45	s	IC TA78L09F
IC213	8-759-374-91	o	IC NM27C512V-CA701V1.00
IC302	8-752-368-47	s	IC CXD206-114R
IC304	8-759-079-46	s	IC TC74VHC00FS(EL)
IC305	8-759-079-61	s	IC TC74VHC74FS(EL)
IC306	8-759-186-54	s	IC TC74VHC164F
IC307	8-759-186-54	s	IC TC74VHC164F
IC308	8-759-271-86	s	IC TC7SH04FU
IC309	8-759-080-03	s	IC TC74VHCT541FS(EL)
L101	1-410-389-31	s	INDUCTOR CHIP 47UH
L102	1-410-393-11	s	INDUCTOR, CHIP 100uH
L152	1-410-393-11	s	INDUCTOR, CHIP 100uH
L201	1-424-653-11	s	COIL, CHOKE 10UH
Q1	8-729-028-91	s	TRANSISTOR DTA144EUA-T106
Q2	8-729-230-63	s	TRANSISTOR 2SC4116YG
Q101	8-729-014-86	s	TRANSISTOR 2SC4207-YGRTE85L
Q102	8-729-230-63	s	TRANSISTOR 2SC4116YG
Q103	8-729-230-63	s	TRANSISTOR 2SC4116YG
Q104	8-729-230-63	s	TRANSISTOR 2SC4116YG
Q151	8-729-014-86	s	TRANSISTOR 2SC4207-YGRTE85L
Q152	8-729-230-63	s	TRANSISTOR 2SC4116YG
Q153	8-729-230-63	s	TRANSISTOR 2SC4116YG
Q154	8-729-230-63	s	TRANSISTOR 2SC4116YG
Q201	8-729-015-47	s	TRANSISTOR 2SK1062
Q202	8-729-029-14	s	TRANSISTOR DTC144EUA-T106
Q203	8-729-029-14	s	TRANSISTOR DTC144EUA-T106
Q204	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q205	8-729-028-91	s	TRANSISTOR DTA144EUA-T106
Q206	8-729-028-91	s	TRANSISTOR DTA144EUA-T106
Q301	8-729-144-56	s	TRANSISTOR 2SC3617
Q302	8-729-020-94	s	TRANSISTOR 2SA1314C-TE12L
Q306	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q307	8-729-028-91	s	TRANSISTOR DTA144EUA-T106
R1	1-216-797-11	s	METAL, CHIP 10 5% 1/16W
R3	1-216-841-11	s	METAL, CHIP 47K 5% 1/16W
R4	1-216-841-11	s	METAL, CHIP 47K 5% 1/16W
R5	1-216-841-11	s	METAL, CHIP 47K 5% 1/16W
R6	1-218-751-11	s	METAL, CHIP 300K 0.5% 1/16W
R7	1-216-837-11	s	METAL, CHIP 22K 5% 1/16W
R8	1-216-840-11	s	METAL, CHIP 39K 5% 1/16W
R9	1-216-846-11	s	METAL, CHIP 120K 5% 1/16W
R10	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R11	1-218-677-11	s	METAL, CHIP 240 0.5% 1/16W
R12	1-218-858-11	s	METAL, CHIP 3K 0.5% 1/16W
R13	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R14	1-218-677-11	s	METAL, CHIP 240 0.5% 1/16W
R15	1-218-858-11	s	METAL, CHIP 3K 0.5% 1/16W
R16	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W

(DA-98 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R17	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R101	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R102	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R105	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R106	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R109	1-218-725-11	s	METAL, CHIP 24K 0.5% 1/16W
R111	1-218-725-11	s	METAL, CHIP 24K 0.5% 1/16W
R113	1-218-702-11	s	METAL, CHIP 2.7K 0.5% 1/16W
R114	1-218-702-11	s	METAL, CHIP 2.7K 0.5% 1/16W
R115	1-218-702-11	s	METAL, CHIP 2.7K 0.5% 1/16W
R119	1-218-692-11	s	METAL, CHIP 1K 0.5% 1/16W
R121	1-218-704-11	s	METAL, CHIP 3.3K 0.5% 1/16W
R123	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R125	1-216-822-11	s	METAL, CHIP 1.2K 5% 1/16W
R129	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R130	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R131	1-216-797-11	s	METAL, CHIP 10 5% 1/16W
R132	1-216-829-11	s	METAL, CHIP 4.7K 5% 1/16W
R133	1-218-838-11	s	METAL, CHIP 430 0.5% 1/16W
R134	1-218-722-11	s	METAL, CHIP 18K 0.5% 1/16W
R135	1-218-677-11	s	METAL, CHIP 240 0.5% 1/16W
R136	1-216-841-11	s	METAL, CHIP 47K 5% 1/16W
R137	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R138	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R139	1-218-723-11	s	METAL, CHIP 20K 0.5% 1/16W
R140	1-218-723-11	s	METAL, CHIP 20K 0.5% 1/16W
R141	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R142	1-218-702-11	s	METAL, CHIP 2.7K 0.5% 1/16W
R143	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R144	1-216-849-11	s	METAL, CHIP 220K 5% 1/16W
R145	1-216-809-11	s	METAL, CHIP 100 5% 1/16W
R146-150	1-218-692-11	s	METAL, CHIP 1K 0.5% 1/16W
R151	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R152	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R155	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R156	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R159	1-218-725-11	s	METAL, CHIP 24K 0.5% 1/16W
R161	1-218-725-11	s	METAL, CHIP 24K 0.5% 1/16W
R163	1-218-702-11	s	METAL, CHIP 2.7K 0.5% 1/16W
R164	1-218-702-11	s	METAL, CHIP 2.7K 0.5% 1/16W
R165	1-218-702-11	s	METAL, CHIP 2.7K 0.5% 1/16W
R169	1-218-692-11	s	METAL, CHIP 1K 0.5% 1/16W
R171	1-218-704-11	s	METAL, CHIP 3.3K 0.5% 1/16W
R173	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R175	1-216-822-11	s	METAL, CHIP 1.2K 5% 1/16W
R179	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R180	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R181	1-216-797-11	s	METAL, CHIP 10 5% 1/16W
R182	1-216-829-11	s	METAL, CHIP 4.7K 5% 1/16W
R183	1-218-838-11	s	METAL, CHIP 430 0.5% 1/16W
R184	1-218-722-11	s	METAL, CHIP 18K 0.5% 1/16W
R185	1-218-677-11	s	METAL, CHIP 240 0.5% 1/16W
R186	1-216-841-11	s	METAL, CHIP 47K 5% 1/16W
R187	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R188	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R189	1-218-723-11	s	METAL, CHIP 20K 0.5% 1/16W
R190	1-218-723-11	s	METAL, CHIP 20K 0.5% 1/16W
R191	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R192	1-218-702-11	s	METAL, CHIP 2.7K 0.5% 1/16W

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Ref. No. or Q'ty	Part No.	SP	Description
R193	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R194	1-216-849-11	s	METAL, CHIP 220K 5% 1/16W
R195	1-216-809-11	s	METAL, CHIP 100 5% 1/16W
R196-200	1-218-692-11	s	METAL, CHIP 1K 0.5% 1/16W
R201	1-216-841-11	s	METAL, CHIP 47K 5% 1/16W
R202	1-216-849-11	s	METAL, CHIP 220K 5% 1/16W
R203	1-216-849-11	s	METAL, CHIP 220K 5% 1/16W
R204	1-218-692-11	s	METAL, CHIP 1K 0.5% 1/16W
R205	1-218-692-11	s	METAL, CHIP 1K 0.5% 1/16W
R206	1-216-849-11	s	METAL, CHIP 220K 5% 1/16W
R207	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R208	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R209	1-218-723-11	s	METAL, CHIP 20K 0.5% 1/16W
R210	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R211	1-218-889-11	s	METAL, CHIP 56K 0.5% 1/16W
R212	1-216-857-11	s	METAL, CHIP 1M 5% 1/16W
R213	1-216-813-11	s	METAL, CHIP 220 5% 1/16W
R214	1-216-849-11	s	METAL, CHIP 220K 5% 1/16W
R215	1-216-849-11	s	METAL, CHIP 220K 5% 1/16W
R217-223	1-216-849-11	s	METAL, CHIP 220K 5% 1/16W
R224	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R225	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R227	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R228	1-218-692-11	s	METAL, CHIP 1K 0.5% 1/16W
R229	1-218-692-11	s	METAL, CHIP 1K 0.5% 1/16W
R230	1-218-692-11	s	METAL, CHIP 1K 0.5% 1/16W
R231	1-216-809-11	s	METAL, CHIP 100 5% 1/16W
R232	1-216-809-11	s	METAL, CHIP 100 5% 1/16W
R233	1-216-809-11	s	METAL, CHIP 100 5% 1/16W
R234	1-218-692-11	s	METAL, CHIP 1K 0.5% 1/16W
R235	1-216-841-11	s	METAL, CHIP 47K 5% 1/16W
R236	1-218-692-11	s	METAL, CHIP 1K 0.5% 1/16W
R237	1-216-849-11	s	METAL, CHIP 220K 5% 1/16W
R239	1-216-841-11	s	METAL, CHIP 47K 5% 1/16W
R240	1-216-864-11	s	METAL, CHIP 0 5% 1/16W
R242	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R243	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R244	1-216-845-11	s	METAL, CHIP 100K 5% 1/16W
R250	1-216-849-11	s	METAL, CHIP 220K 5% 1/16W
R301	1-216-809-11	s	METAL, CHIP 100 5% 1/16W
R302	1-218-700-11	s	METAL, CHIP 2.2K 0.5% 1/16W
R303	1-216-845-11	s	METAL, CHIP 100K 5% 1/16W
R304	1-216-813-11	s	METAL, CHIP 220 5% 1/16W
R305	1-216-813-11	s	METAL, CHIP 220 5% 1/16W
R306	1-216-864-11	s	METAL, CHIP 0 5% 1/16W
R307	1-216-849-11	s	METAL, CHIP 220K 5% 1/16W
R308	1-216-849-11	s	METAL, CHIP 220K 5% 1/16W
R310	1-218-716-11	s	METAL, CHIP 10K 0.5% 1/16W
R311	1-216-845-11	s	METAL, CHIP 100K 5% 1/16W
R312	1-216-845-11	s	METAL, CHIP 100K 5% 1/16W
R313	1-216-864-11	s	METAL, CHIP 0 5% 1/16W
RB201	1-236-904-11	s	NETWORK RESISTOR (CHIP) 1.0K
RB202	1-236-904-11	s	NETWORK RESISTOR (CHIP) 1.0K
RB203	1-239-310-11	s	RESISTOR ARRAY, CHIP 220K
RB204	1-239-310-11	s	RESISTOR ARRAY, CHIP 220K
RB205	1-239-310-11	s	RESISTOR ARRAY, CHIP 220K
RB206	1-239-310-11	s	RESISTOR ARRAY, CHIP 220K
RB207	1-239-444-11	s	NETWORK RESISTOR (CHIP) 220K

(DA-98 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
RB208	1-239-444-11	s	NETWORK RESISTOR (CHIP) 220K
RV2	1-237-039-11	s	RES, ADJ METAL 100K
RV101	1-237-033-11	s	RES, ADJ METAL 1K
RV151	1-237-033-11	s	RES, ADJ METAL 1K
S1	1-692-270-21	s	SWITCH, SLIDE
S101	1-571-277-31	s	SWITCH, SLIDE
S201	1-571-277-31	s	SWITCH, SLIDE
X1	1-760-273-11	s	CRYSTAL 20.00000000MHz

DIF-41 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-8272-697-A	o	MOUNTED CIRCUIT BOARD, DIF-41
1pc	3-601-849-01	o	PLATE(1),SHIELD
1pc	3-601-850-01	o	PLATE(2),SHIELD
2pcs	3-601-851-01	o	RUBBER(1),VENTILATION
1pc	3-601-852-01	o	RUBBER(2),VENTILATION
1pc	3-695-279-02	o	PLATE(DIF),ORNAMENTAL
1pc	3-724-753-01	o	RING
5pcs	3-729-061-01	s	SCREW (M2X4.5) (TYPE 1)
C2	1-104-851-11	s	TANTALUM, CHIP 10uF 20% 10V
C3	1-163-038-00	s	CERAMIC 0.1uF 25V
C4	1-163-038-00	s	CERAMIC 0.1uF 25V
C5	1-163-038-00	s	CERAMIC 0.1uF 25V
C6	1-104-851-11	s	TANTALUM, CHIP 10uF 20% 10V
C7	1-163-038-00	s	CERAMIC 0.1uF 25V
C8	1-163-038-00	s	CERAMIC 0.1uF 25V
C9	1-163-038-00	s	CERAMIC 0.1uF 25V
C10-14	1-163-227-11	s	CERAMIC, CHIP 10PF 5% 50V
C15	1-104-851-11	s	TANTALUM, CHIP 10uF 20% 10V
C16	1-163-038-00	s	CERAMIC 0.1uF 25V
C18-22	1-163-038-00	s	CERAMIC 0.1uF 25V
C23	1-104-851-11	s	TANTALUM, CHIP 10uF 20% 10V
C24-29	1-163-038-00	s	CERAMIC 0.1uF 25V
C30	1-163-121-00	s	CERAMIC, CHIP 150PF 5% 50V
C31	1-104-851-11	s	TANTALUM, CHIP 10uF 20% 10V
C32	1-163-038-00	s	CERAMIC 0.1uF 25V
C33	1-163-038-00	s	CERAMIC 0.1uF 25V
C34	1-104-851-11	s	TANTALUM, CHIP 10uF 20% 10V
C36-43	1-163-038-00	s	CERAMIC 0.1uF 25V
C44	1-128-397-21	s	ELECT 100uF 20% 16V
C45	1-135-166-21	s	TANTALUM, CHIP 47uF 10% 10V
C46	1-163-038-00	s	CERAMIC 0.1uF 25V
C47	1-163-038-00	s	CERAMIC 0.1uF 25V
C48	1-104-851-11	s	TANTALUM, CHIP 10uF 20% 10V
C49	1-163-038-00	s	CERAMIC 0.1uF 25V
C51	1-163-038-00	s	CERAMIC 0.1uF 25V
C52	1-163-038-00	s	CERAMIC 0.1uF 25V
C53	1-163-038-00	s	CERAMIC 0.1uF 25V
C54	1-128-397-21	s	ELECT 100uF 20% 16V
C55	1-163-038-00	s	CERAMIC 0.1uF 25V
C57-62	1-163-038-00	s	CERAMIC 0.1uF 25V
C63	1-163-251-11	s	CERAMIC, CHIP 100PF 5% 50V
C64	1-163-038-00	s	CERAMIC 0.1uF 25V
C65	1-163-125-00	s	CERAMIC, CHIP 220PF 5% 50V
C66-70	1-163-038-00	s	CERAMIC 0.1uF 25V
C71	1-163-085-00	s	CERAMIC, CHIP 2PF 50V
C72	1-163-085-00	s	CERAMIC, CHIP 2PF 50V
CN1	1-695-453-11	s	CONNECTOR, BOARD TO BOARD 50P
CN2	1-750-880-11	s	CONNECTOR, COAXIAL
CN3	1-750-880-11	s	CONNECTOR, COAXIAL
D1	8-719-801-78	s	DIODE 1SS184
D2	8-719-801-78	s	DIODE 1SS184
FB1	1-543-309-21	s	BEAD, FERRITE
FB2	1-543-309-21	s	BEAD, FERRITE
IC1	8-759-080-03	s	IC TC74VHCT541FS(EL)
IC2	8-759-080-06	s	IC TC74VHC574FS(EL)
IC3	8-759-147-05	s	IC UPD42101G-3
IC4	8-759-080-03	s	IC TC74VHCT541FS(EL)

(DIF-41 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
IC5	8-759-080-06	s	IC TC74VHC574FS(EL)
IC6	8-759-147-05	s	IC UPD42101G-3
IC7	8-759-080-03	s	IC TC74VHCT541FS(EL)
IC8	8-759-081-42	s	IC TC74VHC00F(EL)
IC9	8-759-081-44	s	IC TC74VHC04F(EL)
IC10	8-759-186-39	s	IC TC74VHC74F
IC12	8-759-519-12	s	IC CXD8281Q
IC13	8-759-172-73	s	IC CXD8385Q
IC14	8-741-601-11	s	IC SBX1601A
IC16	8-759-635-27	s	IC M62352GP
IC17	8-759-635-27	s	IC M62352GP
IC18	8-759-081-42	s	IC TC74VHC00F(EL)
IC19	8-759-186-38	s	IC TC74VHC32F
IC20	8-759-185-84	s	IC TC74VHC161F(EL)
IC21	8-759-185-84	s	IC TC74VHC161F(EL)
IC22	8-759-079-61	s	IC TC74VHC74FS(EL)
IC23	8-759-180-08	s	IC TC74HC4538AFS
IC24	8-759-079-61	s	IC TC74VHC74FS(EL)
IC25	8-759-185-84	s	IC TC74VHC161F(EL)
IC26	8-759-185-84	s	IC TC74VHC161F(EL)
IC27	8-759-196-97	s	IC TC7SH32FU-TE85R
IC29	8-759-242-64	s	IC TC4W53F
L1	1-410-733-11	s	INDUCTOR CHIP 0.22UH
L2	1-410-377-31	s	INDUCTOR, CHIP 4.7uH
L3	1-410-377-31	s	INDUCTOR, CHIP 4.7uH
Q1-5	8-729-105-68	s	TRANSISTOR 2SC3356-K
R1	1-216-603-11	s	METAL, CHIP 10 0.5% 1/10W
R2-8	1-216-699-11	s	METAL, CHIP 100K 0.5% 1/10W
R9-15	1-208-774-11	s	METAL, CHIP 470 0.5% 1/10W
R16	1-216-603-11	s	METAL, CHIP 10 0.5% 1/10W
R17-24	1-216-699-11	s	METAL, CHIP 100K 0.5% 1/10W
R25-32	1-208-774-11	s	METAL, CHIP 470 0.5% 1/10W
R33	1-216-603-11	s	METAL, CHIP 10 0.5% 1/10W
R34	1-216-699-11	s	METAL, CHIP 100K 0.5% 1/10W
R35	1-216-627-11	s	METAL, CHIP 100 0.5% 1/10W
R36	1-216-699-11	s	METAL, CHIP 100K 0.5% 1/10W
R37	1-216-627-11	s	METAL, CHIP 100 0.5% 1/10W
R38	1-216-699-11	s	METAL, CHIP 100K 0.5% 1/10W
R39	1-216-627-11	s	METAL, CHIP 100 0.5% 1/10W
R40	1-216-699-11	s	METAL, CHIP 100K 0.5% 1/10W
R41	1-216-627-11	s	METAL, CHIP 100 0.5% 1/10W
R42	1-216-699-11	s	METAL, CHIP 100K 0.5% 1/10W
R43	1-216-627-11	s	METAL, CHIP 100 0.5% 1/10W
R46-56	1-216-295-00	s	RES, CHIP 0
R58	1-216-295-00	s	RES, CHIP 0
R59	1-216-295-00	s	RES, CHIP 0
R60	1-216-295-00	s	RES, CHIP 0
R62	1-216-295-00	s	RES, CHIP 0
R64	1-216-295-00	s	RES, CHIP 0
R66	1-216-295-00	s	RES, CHIP 0
R68-78	1-216-635-11	s	METAL, CHIP 220 0.5% 1/10W
R79	1-216-687-11	s	METAL, CHIP 33K 0.5% 1/10W
R80	1-208-812-11	s	METAL, CHIP 18K 0.5% 1/10W
R81	1-216-687-11	s	METAL, CHIP 33K 0.5% 1/10W
R82	1-208-812-11	s	METAL, CHIP 18K 0.5% 1/10W
R83	1-216-627-11	s	METAL, CHIP 100 0.5% 1/10W
R84	1-216-651-11	s	METAL, CHIP 1K 0.5% 1/10W

(DIF-41 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R85	1-208-806-11	s	METAL, CHIP 10K 0.5% 1/10W
R86	1-216-635-11	s	METAL, CHIP 220 0.5% 1/10W
R87	1-216-635-11	s	METAL, CHIP 220 0.5% 1/10W
R88	1-216-625-11	s	METAL, CHIP 82 0.5% 1/10W
R89	1-216-624-11	s	METAL, CHIP 75 0.5% 1/10W
R90	1-216-624-11	s	METAL, CHIP 75 0.5% 1/10W
R91	1-216-651-11	s	METAL, CHIP 1K 0.5% 1/10W
R92	1-216-615-11	s	METAL, CHIP 33 0.5% 1/10W
R93	1-216-615-11	s	METAL, CHIP 33 0.5% 1/10W
R94	1-216-625-11	s	METAL, CHIP 82 0.5% 1/10W
R95	1-216-619-11	s	METAL, CHIP 47 0.5% 1/10W
R96	1-216-619-11	s	METAL, CHIP 47 0.5% 1/10W
R97	1-216-631-11	s	METAL, CHIP 150 0.5% 1/10W
R98	1-216-631-11	s	METAL, CHIP 150 0.5% 1/10W
R99	1-216-651-11	s	METAL, CHIP 1K 0.5% 1/10W
R100	1-216-623-11	s	METAL, CHIP 68 0.5% 1/10W
R101	1-216-651-11	s	METAL, CHIP 1K 0.5% 1/10W
R102	1-216-623-11	s	METAL, CHIP 68 0.5% 1/10W
R107	1-216-699-11	s	METAL, CHIP 100K 0.5% 1/10W
R112	1-216-295-00	s	RES, CHIP 0
R114	1-216-699-11	s	METAL, CHIP 100K 0.5% 1/10W
R115	1-216-699-11	s	METAL, CHIP 100K 0.5% 1/10W
R116	1-216-699-11	s	METAL, CHIP 100K 0.5% 1/10W
R117	1-216-651-11	s	METAL, CHIP 1K 0.5% 1/10W
R118	1-216-699-11	s	METAL, CHIP 100K 0.5% 1/10W
R119	1-216-627-11	s	METAL, CHIP 100 0.5% 1/10W
R133	1-216-699-11	s	METAL, CHIP 100K 0.5% 1/10W
R135	1-216-295-00	s	RES, CHIP 0
R137	1-216-295-00	s	RES, CHIP 0
R138-152	1-216-603-11	s	METAL, CHIP 10 0.5% 1/10W
R153	1-216-627-11	s	METAL, CHIP 100 0.5% 1/10W
R154	1-216-627-11	s	METAL, CHIP 100 0.5% 1/10W
R155	1-216-627-11	s	METAL, CHIP 100 0.5% 1/10W
R156	1-218-764-11	s	METAL, CHIP 330K 0.5% 1/10W
R157	1-216-295-00	s	RES, CHIP 0
R158	1-216-295-00	s	RES, CHIP 0
RV1	1-237-033-11	s	RES, ADJ METAL 1K

DP-234 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-659-725-11	o	PRINTED CIRCUIT BOARD, DP-234
1pc	3-695-271-01	o	SPACER,LCD
C1	1-164-156-11	s	CERAMIC, CHIP 0.1uF 25V
C2	1-162-963-11	s	CERAMIC, CHIP 680PF 10% 50V
CN1	1-750-143-11	o	PIN, SIL 7P
D1	8-719-037-73	s	DIODE CL-181Y-C
D2	8-719-037-73	s	DIODE CL-181Y-C
IC1	8-759-249-93	s	IC LC75821W
LCD1	1-801-194-11	s	LCD
R1	1-218-733-11	s	METAL, CHIP 51K 0.5% 1/16W
R2	1-218-670-11	s	METAL, CHIP 120 0.5% 1/16W
R3	1-218-670-11	s	METAL, CHIP 120 0.5% 1/16W
RB1	1-239-444-11	s	NETWORK RESISTOR (CHIP) 220K

HN-225 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-659-724-11	o	PRINTED CIRCUIT BOARD, HN-225
CN1	1-573-360-21	s	CONNECTOR, FFC/FPC 20P
CN2	1-573-360-21	s	CONNECTOR, FFC/FPC 20P
CN11	1-569-531-11	s	HOUSING, 20P
CN12	1-569-531-11	s	HOUSING, 20P

MB-651 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-8272-691-A	o	MOUNTED CIRCUIT BOARD, MB-651
6pcs	3-729-061-01	s	SCREW (M2X4.5) (TYPE 1)
C1	1-102-074-00	s	CERAMIC 0.001uF 10% 50V
C2	1-102-074-00	s	CERAMIC 0.001uF 10% 50V
C3	1-102-074-00	s	CERAMIC 0.001uF 10% 50V
CN101	1-691-845-11	o	CONNECTOR, BOARD TO BOARD 50P
CN201	1-691-845-11	o	CONNECTOR, BOARD TO BOARD 50P
CN301	1-691-845-11	o	CONNECTOR, BOARD TO BOARD 50P
CN401	1-569-531-11	s	HOUSING, 20P
CN402	1-569-531-11	s	HOUSING, 20P
CN501	1-569-531-11	s	HOUSING, 20P
CN502	1-569-531-11	s	HOUSING, 20P
CN601	1-770-678-11	o	CONNECTOR, BOARD TO BOARD 50P
CN701	1-566-982-11	o	CONNECTOR, ILS 9P, MALE
CN702	1-564-710-11	o	PIN HEADER, STRAIGHT 8P
CN703	1-566-982-11	o	CONNECTOR, ILS 9P, MALE
CN704	1-573-290-21	s	CONNECTOR, 1.5MM SMD 4P, MALE

RE-123 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-8272-699-A	o	MOUNTED CIRCUIT BOARD, RE-123
1pc	3-695-280-02	o	PLATE(RE),ORNAMENTAL
1pc	3-724-753-01	o	RING
5pcs	3-729-061-01	s	SCREW (M2X4.5) (TYPE 1)
C1	1-127-513-00	s	ALUMN SOLID 15uF 20% 25V
C2	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C3	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C4	1-127-513-00	s	ALUMN SOLID 15uF 20% 25V
C5	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C6	1-127-515-11	s	ALUMN SOLID 47uF 20% 10V
C7	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C8	1-111-034-11	s	ELECT 220uF 20% 16V
C10	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C11	1-127-530-11	s	ELECT 22uF 20% 20V
C12	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C13	1-109-894-11	s	ELECT 33uF 20% 10V
C14	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C15	1-111-034-11	s	ELECT 220uF 20% 16V
C16	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C20	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C21	1-127-530-11	s	ELECT 22uF 20% 20V
C22	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C23	1-109-894-11	s	ELECT 33uF 20% 10V
C24	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C25	1-111-034-11	s	ELECT 220uF 20% 16V
C30	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C31	1-127-513-00	s	ALUMN SOLID 15uF 20% 25V
C32	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C33	1-127-515-11	s	ALUMN SOLID 47uF 20% 10V
C34	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C35	1-111-034-11	s	ELECT 220uF 20% 16V
C36	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C40	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C41	1-127-513-00	s	ALUMN SOLID 15uF 20% 25V
C42	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C43	1-127-515-11	s	ALUMN SOLID 47uF 20% 10V
C44	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C45	1-111-034-11	s	ELECT 220uF 20% 16V
C60	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C61	1-135-138-11	s	TANTALUM 10uF 20% 25V
C62	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C63	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C70	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C71	1-127-530-11	s	ELECT 22uF 20% 20V
C72	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C75	1-111-110-11	s	ELECT 39uF 20% 50V
C76	1-111-110-11	s	ELECT 39uF 20% 50V
C77	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C81	1-164-232-11	s	CERAMIC, CHIP 0.01uF 10% 100V
C82	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C89	1-135-210-11	s	TANTALUM, CHIP 4.7uF 20% 10V
C101	1-126-941-11	s	ELECT 470uF 20% 25V
C102	1-126-941-11	s	ELECT 470uF 20% 25V
C103	1-164-232-11	s	CERAMIC, CHIP 0.01uF 10% 100V
C204	1-135-210-11	s	TANTALUM, CHIP 4.7uF 20% 10V
C205	1-135-180-21	s	TANTALUM, CHIP 33uF 10% 10V
C206	1-135-180-21	s	TANTALUM, CHIP 33uF 10% 10V
C207	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C208	1-163-989-11	s	CERAMIC, CHIP 0.033uF 10% 25V

(RE-123 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C209	1-163-037-11	s	CERAMIC, CHIP 0.022uF 10% 25V
C210	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C212	1-135-210-11	s	TANTALUM, CHIP 4.7uF 20% 10V
C213	1-135-180-21	s	TANTALUM, CHIP 33uF 10% 10V
C214	1-135-180-21	s	TANTALUM, CHIP 33uF 10% 10V
C215	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C216	1-163-037-11	s	CERAMIC, CHIP 0.022uF 10% 25V
C217	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C218	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C220	1-135-210-11	s	TANTALUM, CHIP 4.7uF 20% 10V
C221	1-135-180-21	s	TANTALUM, CHIP 33uF 10% 10V
C222	1-135-180-21	s	TANTALUM, CHIP 33uF 10% 10V
C223	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C224	1-163-989-11	s	CERAMIC, CHIP 0.033uF 10% 25V
C225	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C226	1-164-004-11	s	CERAMIC, CHIP 0.1uF 10% 25V
C251	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
CB101 !	1-533-518-21	s	BREAKER, CIRCUIT 3.15A AC 250V
CN1	1-695-453-11	s	CONNECTOR, BOARD TO BOARD 50P
D1	8-719-044-73	s	DIODE ECL06B025-TE16F2
D7	8-719-104-34	s	DIODE 1S2835
D8	8-719-104-34	s	DIODE 1S2835
D10	8-719-048-17	s	DIODE MBRS130LT3
D20	8-719-048-17	s	DIODE MBRS130LT3
D30	8-719-044-73	s	DIODE ECL06B025-TE16F2
D40	8-719-044-73	s	DIODE ECL06B025-TE16F2
D50	8-719-104-34	s	DIODE 1S2835
D60	8-719-104-34	s	DIODE 1S2835
D71	8-719-989-93	s	DIODE SB01-15CP
D72	8-719-104-34	s	DIODE 1S2835
D80	8-719-104-34	s	DIODE 1S2835
D102	8-719-030-03	s	DIODE EA60QC06-TE16F2
F1 !	1-533-282-21	s	LINK, IC
IC1	8-729-021-17	s	TRANSISTOR SI9947DY-T1
IC10	8-729-021-17	s	TRANSISTOR SI9947DY-T1
IC11	8-729-025-54	s	TRANSISTOR SI9958DY
IC12	8-759-196-97	s	IC TC7SH32FU-TE85R
IC30	8-729-021-17	s	TRANSISTOR SI9947DY-T1
IC31	8-729-025-54	s	TRANSISTOR SI9958DY
IC32	8-759-271-86	s	IC TC7SH04FU
IC60	8-759-927-99	s	IC MB3761PF
IC81	8-729-021-17	s	TRANSISTOR SI9947DY-T1
IC101	8-729-021-17	s	TRANSISTOR SI9947DY-T1
IC102	8-729-021-17	s	TRANSISTOR SI9947DY-T1
IC202	8-759-260-57	s	IC TL1451ACPW-E05
IC203	8-759-260-57	s	IC TL1451ACPW-E05
IC204	8-759-260-57	s	IC TL1451ACPW-E05
L1	1-409-579-11	s	COIL, CHOKE 8.2uH
L2	1-409-721-11	s	COIL, CHOKE 42uH
L3	1-409-579-11	s	COIL, CHOKE 8.2uH
L10	1-409-579-11	s	COIL, CHOKE 8.2uH
L11	1-409-722-11	s	COIL, CHOKE 220uH
L12	1-409-579-11	s	COIL, CHOKE 8.2uH
L20	1-409-579-11	s	COIL, CHOKE 8.2uH
L21	1-409-722-11	s	COIL, CHOKE 220uH
L22	1-409-579-11	s	COIL, CHOKE 8.2uH

(RE-123 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
L30	1-409-579-11	s	COIL, CHOKE 8.2uH
L31	1-409-721-11	s	COIL, CHOKE 42uH
L32	1-409-579-11	s	COIL, CHOKE 8.2uH
L40	1-409-579-11	s	COIL, CHOKE 8.2uH
L41	1-409-721-11	s	COIL, CHOKE 42uH
L42	1-409-579-11	s	COIL, CHOKE 8.2uH
L70	1-409-579-11	s	COIL, CHOKE 8.2uH
L72	1-409-579-11	s	COIL, CHOKE 8.2uH
Q1	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q2	8-729-112-65	s	TRANSISTOR 2SA1462-Y33
Q10	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q11	8-729-112-65	s	TRANSISTOR 2SA1462-Y33
Q20	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q21	8-729-112-65	s	TRANSISTOR 2SA1462-Y33
Q22	8-729-018-50	s	TRANSISTOR IRFR9020-TR
Q30	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q31	8-729-112-65	s	TRANSISTOR 2SA1462-Y33
Q40	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q41	8-729-112-65	s	TRANSISTOR 2SA1462-Y33
Q42	8-729-018-50	s	TRANSISTOR IRFR9020-TR
Q50	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q51	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q60	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q61	8-729-027-38	s	TRANSISTOR DTA144EKA-T146
Q62	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q70	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q71	8-729-112-65	s	TRANSISTOR 2SA1462-Y33
Q72	8-729-018-50	s	TRANSISTOR IRFR9020-TR
Q81	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q82	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q83	8-729-112-65	s	TRANSISTOR 2SA1462-Y33
Q105	8-729-027-38	s	TRANSISTOR DTA144EKA-T146
Q106	8-729-027-59	s	TRANSISTOR DTC144EKA-T146
Q107	8-729-027-59	s	TRANSISTOR DTC144EKA-T146
Q151	8-729-027-38	s	TRANSISTOR DTA144EKA-T146
Q181	8-729-027-59	s	TRANSISTOR DTC144EKA-T146
Q201	8-729-027-44	s	TRANSISTOR DTC114TKA-T146
Q202	8-729-027-44	s	TRANSISTOR DTC114TKA-T146
Q203	8-729-027-44	s	TRANSISTOR DTC114TKA-T146
R3	1-216-665-11	s	METAL, CHIP 3.9K 0.5% 1/10W
R4	1-216-603-11	s	METAL, CHIP 10 0.5% 1/10W
R5	1-216-295-00	s	RES, CHIP 0
R10	1-208-801-11	s	METAL, CHIP 6.2K 0.5% 1/10W
R11	1-216-603-11	s	METAL, CHIP 10 0.5% 1/10W
R20	1-216-665-11	s	METAL, CHIP 3.9K 0.5% 1/10W
R21	1-216-665-11	s	METAL, CHIP 3.9K 0.5% 1/10W
R22	1-216-603-11	s	METAL, CHIP 10 0.5% 1/10W
R30	1-216-665-11	s	METAL, CHIP 3.9K 0.5% 1/10W
R31	1-216-603-11	s	METAL, CHIP 10 0.5% 1/10W
R40	1-216-663-11	s	METAL, CHIP 3.3K 0.5% 1/10W
R41	1-216-663-11	s	METAL, CHIP 3.3K 0.5% 1/10W
R42	1-216-603-11	s	METAL, CHIP 10 0.5% 1/10W
R50	1-208-814-11	s	METAL, CHIP 22K 0.5% 1/10W
R51	1-216-684-11	s	METAL, CHIP 24K 0.5% 1/10W
R52	1-208-814-11	s	METAL, CHIP 22K 0.5% 1/10W
R53	1-216-684-11	s	METAL, CHIP 24K 0.5% 1/10W
R60	1-216-699-11	s	METAL, CHIP 100K 0.5% 1/10W
R61	1-208-817-11	s	METAL, CHIP 30K 0.5% 1/10W

(RE-123 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R62	1-216-674-11	s	METAL, CHIP 9.1K 0.5% 1/10W
R63	1-216-696-11	s	METAL, CHIP 75K 0.5% 1/10W
R64	1-208-810-11	s	METAL, CHIP 15K 0.1% 1/10W
R65	1-216-655-11	s	METAL, CHIP 1.5K 0.5% 1/10W
R66	1-208-817-11	s	METAL, CHIP 30K 0.5% 1/10W
R67	1-216-089-00	s	METAL, CHIP 47k 5% 1/10W
R68	1-216-089-00	s	METAL, CHIP 47k 5% 1/10W
R69	1-216-671-11	s	METAL, CHIP 6.8K 0.5% 1/10W
R70	1-216-699-11	s	METAL, CHIP 100K 0.5% 1/10W
R71	1-216-665-11	s	METAL, CHIP 3.9K 0.5% 1/10W
R72	1-216-665-11	s	METAL, CHIP 3.9K 0.5% 1/10W
R73	1-216-665-11	s	METAL, CHIP 3.9K 0.5% 1/10W
R74	1-216-603-11	s	METAL, CHIP 10 0.5% 1/10W
R75	1-216-089-00	s	METAL, CHIP 47k 5% 1/10W
R76	1-216-603-11	s	METAL, CHIP 10 0.5% 1/10W
R77	1-216-603-11	s	METAL, CHIP 10 0.5% 1/10W
R81	1-216-699-11	s	METAL, CHIP 100K 0.5% 1/10W
R82	1-216-695-11	s	METAL, CHIP 68K 0.5% 1/10W
R83	1-208-822-11	s	METAL, CHIP 47K 0.5% 1/10W
R84	1-208-806-11	s	METAL, CHIP 10K 0.5% 1/10W
R85	1-216-671-11	s	METAL, CHIP 6.8K 0.5% 1/10W
R86	1-216-699-11	s	METAL, CHIP 100K 0.5% 1/10W
R100	1-216-033-00	s	METAL, CHIP 220 5% 1/10W
R101	1-216-699-11	s	METAL, CHIP 100K 0.5% 1/10W
R111	1-216-699-11	s	METAL, CHIP 100K 0.5% 1/10W
R112	1-216-699-11	s	METAL, CHIP 100K 0.5% 1/10W
R113	1-216-699-11	s	METAL, CHIP 100K 0.5% 1/10W
R114	1-216-699-11	s	METAL, CHIP 100K 0.5% 1/10W
R115	1-216-295-00	s	RES, CHIP 0
R151	1-216-699-11	s	METAL, CHIP 100K 0.5% 1/10W
R152	1-216-699-11	s	METAL, CHIP 100K 0.5% 1/10W
R153	1-216-295-00	s	RES, CHIP 0
R181	1-216-041-00	s	METAL, CHIP 470 5% 1/10W
R200	1-208-806-11	s	METAL, CHIP 10K 0.5% 1/10W
R201	1-211-998-11	s	METAL, CHIP 4.7K 0.5% 1/10W
R202	1-211-998-11	s	METAL, CHIP 4.7K 0.5% 1/10W
R203	1-211-998-11	s	METAL, CHIP 4.7K 0.5% 1/10W
R204	1-211-998-11	s	METAL, CHIP 4.7K 0.5% 1/10W
R205	1-216-687-11	s	METAL, CHIP 33K 0.5% 1/10W
R206	1-208-822-11	s	METAL, CHIP 47K 0.5% 1/10W
R207	1-216-687-11	s	METAL, CHIP 33K 0.5% 1/10W
R208	1-208-822-11	s	METAL, CHIP 47K 0.5% 1/10W
R209	1-208-810-11	s	METAL, CHIP 15K 0.1% 1/10W
R210	1-218-760-11	s	METAL, CHIP 220K 0.5% 1/10W
R211	1-218-760-11	s	METAL, CHIP 220K 0.5% 1/10W
R212	1-216-684-11	s	METAL, CHIP 24K 0.5% 1/10W
R213	1-218-367-11	s	METAL, CHIP 10K 0.1% 1/10W
R214	1-216-662-11	s	METAL, CHIP 3K 0.5% 1/10W
R215	1-216-639-11	s	METAL, CHIP 330 0.5% 1/10W
R216	1-216-696-11	s	METAL, CHIP 75K 0.5% 1/10W
R217	1-208-789-11	s	METAL, CHIP 2K 0.5% 1/10W
R218	1-211-998-11	s	METAL, CHIP 4.7K 0.5% 1/10W
R219	1-211-998-11	s	METAL, CHIP 4.7K 0.5% 1/10W
R220	1-211-998-11	s	METAL, CHIP 4.7K 0.5% 1/10W
R221	1-211-998-11	s	METAL, CHIP 4.7K 0.5% 1/10W
R222	1-216-687-11	s	METAL, CHIP 33K 0.5% 1/10W
R223	1-208-822-11	s	METAL, CHIP 47K 0.5% 1/10W
R224	1-216-687-11	s	METAL, CHIP 33K 0.5% 1/10W
R225	1-208-822-11	s	METAL, CHIP 47K 0.5% 1/10W

(RE-123 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R226	1-216-684-11	s	METAL, CHIP 24K 0.5% 1/10W
R227	1-218-760-11	s	METAL, CHIP 220K 0.5% 1/10W
R228	1-218-760-11	s	METAL, CHIP 220K 0.5% 1/10W
R229	1-216-667-11	s	METAL, CHIP 4.7K 0.5% 1/10W
R230	1-218-367-11	s	METAL, CHIP 10K 0.1% 1/10W
R231	1-216-660-11	s	METAL, CHIP 2.4K 0.5% 1/10W
R232	1-216-639-11	s	METAL, CHIP 330 0.5% 1/10W
R233	1-216-631-11	s	METAL, CHIP 150 0.5% 1/10W
R234	1-216-660-11	s	METAL, CHIP 2.4K 0.5% 1/10W
R235	1-208-810-11	s	METAL, CHIP 15K 0.1% 1/10W
R236	1-211-998-11	s	METAL, CHIP 4.7K 0.5% 1/10W
R237	1-211-998-11	s	METAL, CHIP 4.7K 0.5% 1/10W
R238	1-211-998-11	s	METAL, CHIP 4.7K 0.5% 1/10W
R239	1-211-998-11	s	METAL, CHIP 4.7K 0.5% 1/10W
R240	1-216-687-11	s	METAL, CHIP 33K 0.5% 1/10W
R241	1-208-822-11	s	METAL, CHIP 47K 0.5% 1/10W
R242	1-216-687-11	s	METAL, CHIP 33K 0.5% 1/10W
R243	1-208-822-11	s	METAL, CHIP 47K 0.5% 1/10W
R244	1-208-810-11	s	METAL, CHIP 15K 0.1% 1/10W
R245	1-218-760-11	s	METAL, CHIP 220K 0.5% 1/10W
R246	1-218-760-11	s	METAL, CHIP 220K 0.5% 1/10W
R247	1-216-655-11	s	METAL, CHIP 1.5K 0.5% 1/10W
R248	1-218-367-11	s	METAL, CHIP 10K 0.1% 1/10W
R249	1-216-662-11	s	METAL, CHIP 3K 0.5% 1/10W
R250	1-216-639-11	s	METAL, CHIP 330 0.5% 1/10W
R251	1-216-662-11	s	METAL, CHIP 3K 0.5% 1/10W
R252	1-208-810-11	s	METAL, CHIP 15K 0.1% 1/10W
T101	1-450-514-11	s	TRANSFORMER, CONVERTER

SW-819 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-565-977-11	s	CONTACT, FEMALE AWG28-32
1pc	1-569-618-11	o	HOUSING, 3P
1pc	1-659-733-11	o	PRINTED CIRCUIT BOARD, SW-819
S101	1-554-400-12	s	SWITCH, TOGGLE

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FRAME
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Ref. No.
or Q'ty  Part No.    SP Description

2pcs     1-774-157-11 s CONVERTER, COAXIAL CONNECTOR
1pc      1-776-444-11 s CABLE, COAXIAL 150MM
1pc      1-776-444-21 s CABLE, COAXIAL 150MM

2pcs     1-776-445-11 s WIRE, FLEXIBLE CARD 20P
 (CN11/HN-225 board to CN501/MB-651 board)
 (CN12/HN-225 board to CN502/MB-651 board)

2pcs     1-776-446-11 s WIRE, FLEXIBLE CARD 20P
 (CN1/AD-119 board to CN401/MB-651 board)
 (CN2/AD-119 board to CN402/MB-651 board)

HARNESS (BATT-MB3)
 (CN102/BATTERY IN connector to CN702/MB-651 board)
  CN102  1-766-377-12 s CONNECTOR, BATTERY
   1pc   1-543-157-11 s BEAD, FERRITE
  CN702  1-562-257-00 o HOUSING, 8P
   7pcs  1-562-260-11 o CONTACT, SOCKET

HARNESS (CAM-MB4)
 (CN101/BATTERY OUT connector to CN703/MB-651 board)
  CN101  1-774-841-11 s CONNECTOR, BATTERY
  CN703  1-580-696-11 o HOUSING 9P
   7pcs  1-562-260-11 o CONTACT, SOCKET

HARNESS (CN-XLR5)
 (CN3/CN-1233 board to W1,W2,W3,W4 and W5/CN-1339 board)
  CN3    1-562-255-00 o HOUSING, 5P
   5pcs  1-562-260-11 o CONTACT, SOCKET

HARNESS (DCOUT-MB2)
 (CN104/DC OUT connector to CN704/MB-651 board)
  CN104  1-565-072-11 s CONNECTOR, CIRCULAR 4P, FEMALE
   1pc   3-695-267-01 o BRACKET, DC-OUT
  CN704  1-569-619-11 o HOUSING, 4P
   4pcs  1-565-977-11 s CONTACT, FEMALE AWG28-32

HARNESS (EXDC-MB1)
 (CN103/EXDC IN connector to CN701/MB-651 board)
  CN103  1-564-603-31 s CONNECTOR, WITH DC SW 4P, MALE
   1pc   1-543-157-11 s BEAD, FERRITE
  CN701  1-580-696-11 o HOUSING 9P
   6pcs  1-562-260-11 o CONTACT, SOCKET

HARNESS (PSW-AD5)
 (CN3/ADA-119 board to W1,W2 and W3/SW-819 board)
  CN3    1-569-618-11 o HOUSING, 3P
   3pcs  1-565-977-11 s CONTACT, FEMALE AWG28-32
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Section 4
Semiconductor Pin Assignments

ここに記載されている半導体は，それぞれの機能を等価的に表したものです。　なお，互換性のない型名を併記していることがありますので，部品を交換するときは，Spare Partsの章を参照してください。
等価回路はＩＣメーカーのデータブックに従いました。

Semiconductors of which functions are equivalent are described here. For parts replacement, refer to the section of Spare Parts in this manual. The circuit diagram of each IC is obtained from the IC data book published by the manufacturer.

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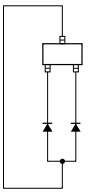
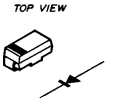
DIODE

TOP VIEW

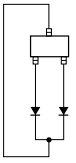


1S2836



EC10DS2

TOP VIEW



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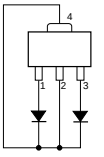
DAN202U

TOP VIEW



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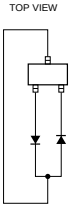
ECL06B025-F

TOP VIEW



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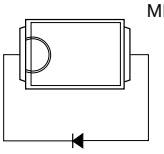

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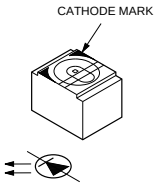
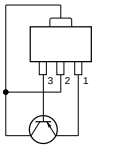


CL-181Y-C ;YELLOW

SB01-15CP

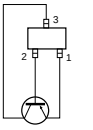
TRANSISTOR

TOP VIEW

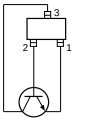


2SA1314C-TE12L

TOP VIEW

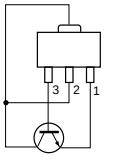


2SA1462
2SA1611



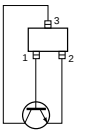
2SC1623
2SC2713G
2SC3356
2SC4177-L6
2SC4213B

TOP VIEW



2SC2982C
2SC3617

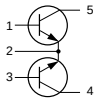
TOP VIEW

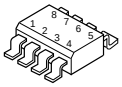


2SC4116

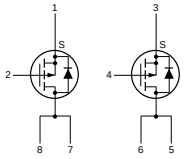
-TOP VIEW-

2SC4207

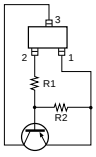




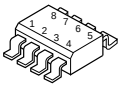
SI9947DY



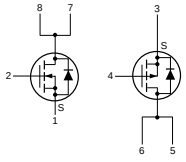
TOP VIEW



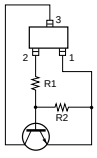
DTA144EKA
(R1=47K,R2=47K)
DTA144EUA
(R1=47K,R2=47K)



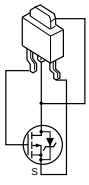
SI9958DY



TOP VIEW



DTC114TK
(R1=10K,R2=OPEN)
DTC144EKA
(R1=47K,R2=47K)
DTC144EUA
(R1=47K,R2=47K)



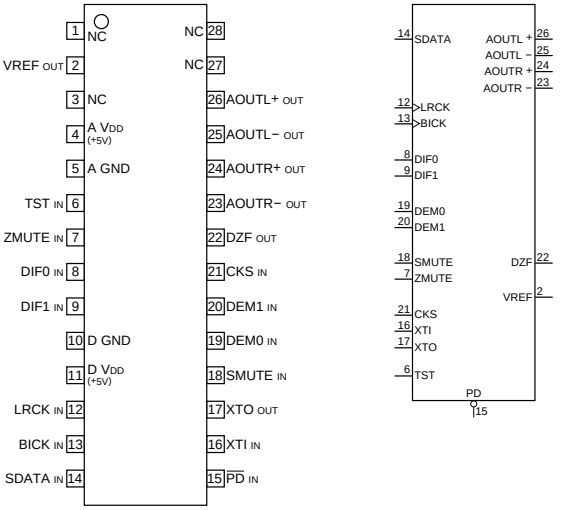
IRFR9020

IC

AK4318-VS(ASAHI KASEI MICRO SYSTEM)FLAT PACKAGE

C-MOS 1-BIT D/A CONVERTER FOR DIGITAL AUDIO

-TOP VIEW-

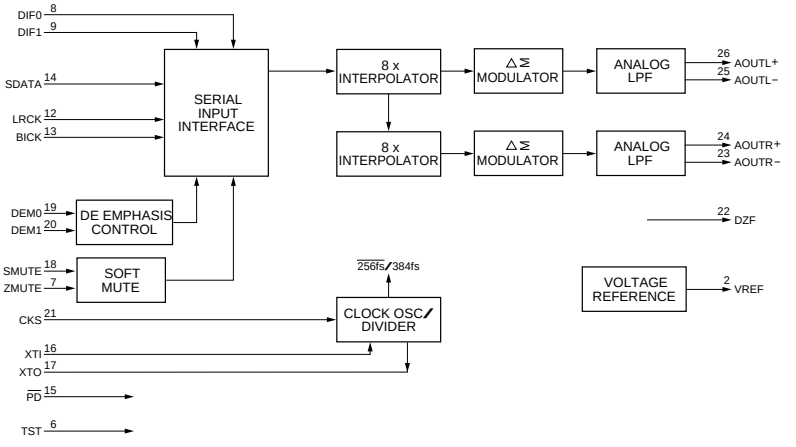


INPUT

BICK	; SERIAL BIT CLOCK
CKS	; CLOCK SELECT (L : CLK = 256fs) (H : CLK = 384fs)
DEM0,1	; DE-EMPHASIS MODE
DIF0,1	; INPUT FORMAT
LRCK	; L/R CLOCK
PD	; RESET
SDATA	; SERIAL DATA
SMUTE	; SOFT MUTE
TST	; TEST PIN
ZMUTE	; ZERO MUTE
XTI	; CRYSTAL OSCILLATOR INPUT

OUTPUT

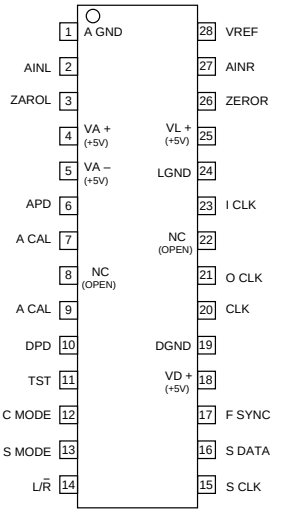
AOUTR +	; R-CH ANALOG POSITIVE OUTPUT
AOUTR −	; R-CH ANALOG NEGATIVE OUTPUT
AOUTL +	; L-CH ANALOG POSITIVE OUTPUT
AOUTL −	; L-CH ANALOG NEGATIVE OUTPUT
DZF	; ZERO INPUT DETECT
VREF	; REFERENCE VOLTAGE
XTO	; CRYSTAL OSCILLATOR OUTPUT

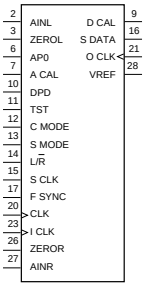


AK5339-VS(ASAHIKASEI)FLAT PACKAGE

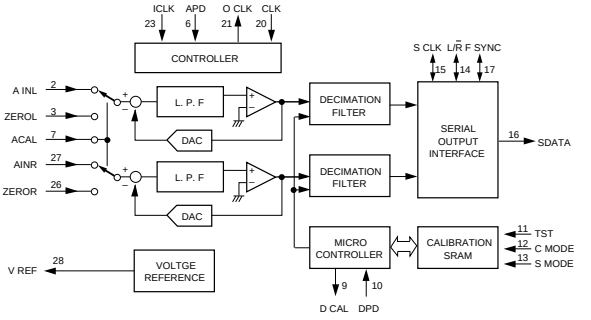
C-MOS OVERSAMPLING STEREO A/D CONVERTER

-TOP VIEW-





A GND ; ANALOG GROUND
D GND ; DIGITAL GROUND
L GND ; LOGIC GROUND
VA + ; VCC FOR ANALOG
VA − ; VEE FOR ANALOG
VD + ; VCC FOR DIGITAL
VL + ; VCC FOR LOGIC



INPUT

ACAL	; ANALOG CALIBRATION NORMALLY, CONNECT TO DCAL PIN.
AINL	; L CHANNEL ANALOG INPUT
AINR	; R CHANNEL ANALOG INPUT
APD	; ANALOG POWER DOWN (H = POWER DOWN MODE) NORMALLY, CONNECT TO DPD PIN.
CLK	; MASTER CLOCK
CMODE	; MASTER CLOCK SELECTION L : CLK = 256fs H : CLK = 384fs
DPD	; DIGITAL POWER DOWN (H = POWER DOWN MODE)
ICLK	; 128fs CLOCK INPUT (CONNECT TO OCLK PIN.)
L/R	; INPUT CHANNEL SELECTION DATA CHANNEL OUTPUT FROM SDATA PIN IS SELECTED. (H = L CHANNEL DATA, L = R CHANNEL DATA)
SCLK	; SERIAL DATA OUTPUT CLOCK
SMODE	; INTERFACE SELECTION L : CONTROLED MODE H : CONTROL MODE
TST	; TEST (CONNECT TO DGND)
ZEROL	; L CHANNEL ZERO LEVEL INPUT
ZEROR	; R CHANNEL ZERO LEVEL INPUT

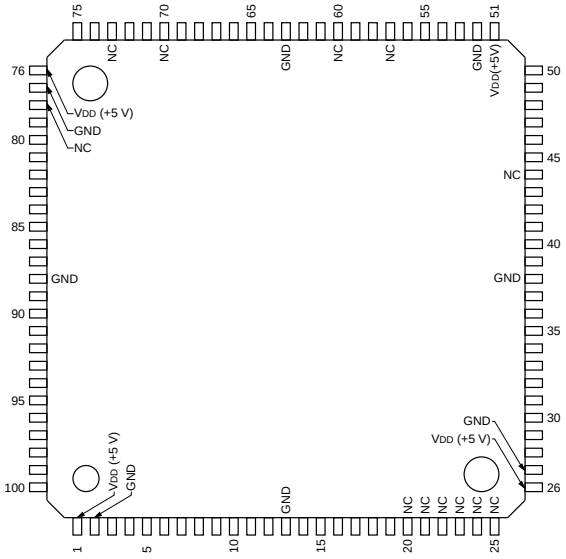
OUTPUT

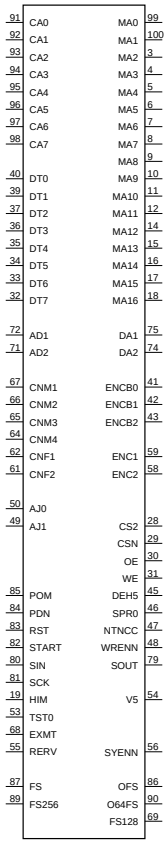
DCAL	; DIGITAL CALIBRATION
OCLK	; 128fs CLOCK OUTPUT
SDATA	; SERIAL DATA OUTPUT DATA IS OUTPUT IN ORDER FROM MSB IN 2ND COMPLEMENT.
VREF	; REFERENCE VOLTAGE SUPPLY OF –3.68V

CXD206-114R(SONY)FLAT PACKAGE

C-MOS AUDIO PROCESSOR

-TOP VIEW-





INPUT

AD1	; A/D 1/2
AD2	; A/D 3/4
AJ0, AJ1	; ADJUST 0, 1
CA0 – CA7	; CHIP ADDRESS 0 – 7
CNF1	; CONFI 1/2
CNF2	; CONFI 3/4
CNM1 – CNM4	; CONFI MUTE 1 – 4
EXMT	; EXTERNAL MUTE
FS	; FS
FS256	; 256 FS
HIM	; H : 1M SRAM / L : 256K
PDN	; L : POWER DOWN
POM	; POWER ON MUTE
REFV	; REFERENCE V
RST	; RESET
SCK	; SERIAL CLOCK
SIN	; SERIAL DATA
START	; SERIAL START
TST0	; TEST 0

OUTPUT

CS2	; CHIP SELECT 2
CSN	; CHIP SELECT ENABLE
DA1	; D/A 1/2
DA2	; D/A 3/4
DEH5	; ADDRESS DECODE 5H
ENC1	; ENCODE 1/2
ENC2	; ENCODE 3/4
ENCB0 – ENCB2	; ENCODE BIT 0 – 2
FS128	; 128 FS
MA0 – MA16	; MEMORY ADDRESS 0 – 16
NTNCC	; H : NTSC / L : PAL
O64FS	; 64 FS
OE	; OUTPUT ENABLE
OFS	; FS
SOUT	; SERIAL DATA
SPR0	; SPARE 0
SYENN	; L : SERIAL ENABLE
V5	; 5V CLOCK
WE	; WRITE ENABLE
WRENN	; WRITE

INPUT/OUTPUT

DT0 – DT7	; MEMORY DATA 0 – 7

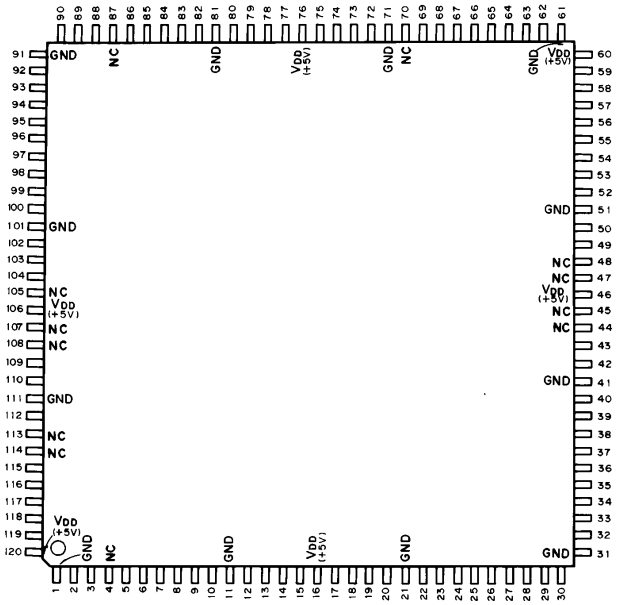
(V_{DD} = +5 V)

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	–	V_{DD}	26	–	V_{DD}	51	–	V_{DD}	76	–	V_{DD}
2	–	GND	27	–	GND	52	–	GND	77	–	GND
3	O	MA2	28	O	CS2	53	I	TST0	78	–	NC
4	O	MA3	29	O	CSN	54	O	V5	79	O	SOUT
5	O	MA4	30	O	OE	55	I	REFV	80	I	SIN
6	O	MA5	31	O	WE	56	O	SYENN	81	I	SCK
7	O	MA6	32	I/O	DT7	57	–	NC	82	I	START
8	O	MA7	33	I/O	DT6	58	O	ENC2	83	I	RST
9	O	MA8	34	I/O	DT5	59	O	ENC1	84	I	PDN
10	O	MA9	35	I/O	DT4	60	–	NC	85	I	POM
11	O	MA10	36	I/O	DT3	61	I	CNF2	86	O	OFS
12	O	MA11	37	I/O	DT2	62	I	CNF1	87	I	FS
13	–	GND	38	–	GND	63	–	GND	88	–	GND
14	O	MA12	39	I/O	DT1	64	I	CNM4	89	I	FS256
15	O	MA13	40	I/O	DT0	65	I	CNM3	90	O	O64FS
16	O	MA14	41	O	ENCB0	66	I	CNM2	91	I	CA0
17	O	MA15	42	O	ENCB1	67	I	CNM1	92	I	CA1
18	O	MA16	43	O	ENCB2	68	I	EXMT	93	I	CA2
19	I	HIM	44	–	NC	69	O	FS128	94	I	CA3
20	–	NC	45	O	DEH5	70	–	NC	95	I	CA4
21	–	NC	46	O	SPR0	71	I	AD2	96	I	CA5
22	–	NC	47	O	NTNCC	72	I	AD1	97	I	CA6
23	–	NC	48	O	WRENN	73	–	NC	98	I	CA7
24	–	NC	49	I	AJ1	74	O	DA2	99	O	MA0
25	–	NC	50	I	AJ2	75	O	DA1	100	O	MA1

CXD8281Q(SONY)FLAT PACKAGE

C-MOS DIGITAL AUDIO TIME BASE COMPRESSION FOR SIF TRANSMITER

– TOP VIEW –



INPUT (WITH PULL-DOWN REGISTER)

128CK	; DIGITAL AUDIO 128 × Fs CLOCK
AD1/2	; DIGITAL AUDIO CH-1/2 DATA
AD3/4	; DIGITAL AUDIO CH-3/4 DATA
BCK	; DIGITAL AUDIO BIT CLOCK (= 64 × Fs)
C1/2	; DIGITAL AUDIO CH-1/2 CHANNEL STATUS BIT
C3/4	; DIGITAL AUDIO CH-3/4 CHANNEL STATUS BIT
OEAUX	; OUTPUT ENABLE FOR AUX0-9 (L)
U1/2	; DIGITAL AUDIO CH-1/2 USER DATA BIT
U3/4	; DIGITAL AUDIO CH-3/4 USER DATA BIT
V1/2	; DIGITAL AUDIO CH-1/2 VALIDITY FLAG
V3/4	; DIGITAL AUDIO CH-3/4 VALIDITY FLAG
VCK	; VIDEO CLOCK (= 4Fsc) INPUT
Z1/2	; DIGITAL AUDIO CH-1/2 BLOCK SYNC (Z-FLAG)
Z3/4	; DIGITAL AUDIO CH-3/4 BLOCK SYNC (Z-FLAG)

INPUT (WITH PULL-UP REGISTER)

20/16	; DIGITAL AUDIO 20BIT/16BIT SELECT
AFS	; DIGITAL AUDIO FORMAT SELECT
CHEX0,1	; CHANNEL EXCHANGE 0,1
CHS1 – CHS4	; AUDIO CH1 – CH4 OUTPUT SELECT (L)
CLR	; POWER ON CLEAR (L)
CWA0 – CWA3	; CHANNEL STATUS REGISTER WRITE ADDRESS 0 – 3
CWCK	; CHANNEL STATUS REGISTER WRITE CLOCK
CWD0 – CWD7	; CHANNEL STATUS REGISTER WRITE DATA 0 – 7
CWEN	; CHANNEL STATUS REGISTER WRITE ENABLE
D2/D1	; VIDEO FORMAT D2/D1 SELECT
DID0,1	; DATA ID BIT0,1
DIR	; DIGITAL AUDIO MSB FIRST/LSB FIRST SELECT
DLY0 – DLY4	; DELAY CONTROL BIT0 – BIT3
IT1 – IT5	; TEST (L)
LIM0,1	; LINE MODE 0,1
LRCK	; DIGITAL AUDIO L/R CLOCK (= Fs)
LRS	; DIGITAL AUDIO LEFT/RIGHT BIT POSITION SELECT
SYNC	; VIDEO SYNC INPUT
ZCS	; DIGITAL AUDIO Z-FLAG C-BIT SELECT

OUTPUT

ADBT	; AUX. DATA BLOCK TIMING
ADFT	; AUX. DATA FLAG TIMING
AUXT	; AUX. DATA TIMING
OT1 – OT19	; TEST
UDT	; USER DATA TIMING

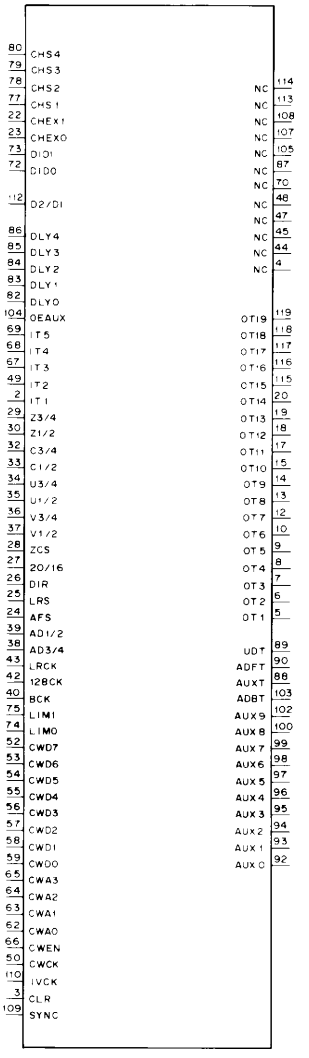
OUTPUT (TRI-STATE)

AUX0 – AUX9 ; AUX. DATA 0 – 9

(VDD = + 5V)

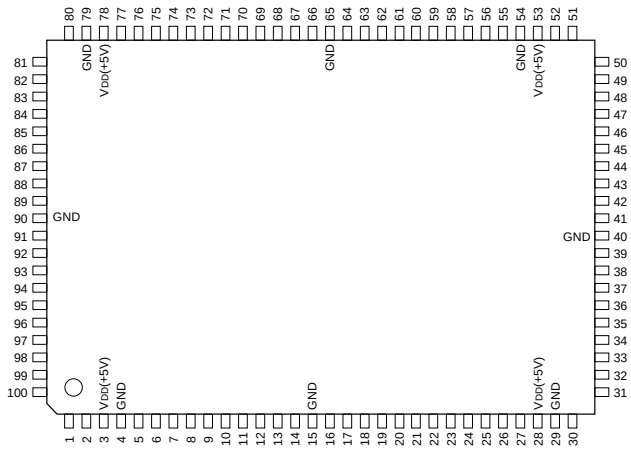
PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	–	VSS	31	–	GND	61	–	GND	91	–	GND
2	IU	IT1	32	ID	C3/4	62	IU	CWA0 (LSB)	92	OT	AUX0 (LSB)
3	IU	CLR	33	ID	C1/2	63	IU	CWA1	93	OT	AUX1
4	–	NC	34	ID	U3/4	64	IU	CWA2	94	OT	AUX2
5	O	OT1	35	ID	U1/2	65	IU	CWA3 (MSB)	95	OT	AUX3
6	O	OT2	36	ID	V3/4	66	IU	CWEN	96	OT	AUX4
7	O	OT3	37	ID	V1/2	67	IU	IT3	97	OT	AUX5
8	O	OT4	38	ID	AD3/4	68	IU	IT4	98	OT	AUX6
9	O	OT5	39	ID	AD1/2	69	IU	IT5	99	OT	AUX7
10	O	OT6	40	ID	BCK	70	–	NC	100	OT	AUX8
11	–	GND	41	–	GND	71	–	GND	101	–	GND
12	O	OT7	42	ID	128CK	72	IU	DID0	102	OT	AUX9 (MSB)
13	O	OT8	43	IU	LRCK	73	IU	DID1	103	O	ADBT
14	O	OT9	44	–	NC	74	IU	LIM0	104	ID	OEAUX
15	O	OT10	45	–	NC	75	IU	LIM1	105	–	NC
16	–	VDD	46	–	VDD	76	–	VDD	106	–	VDD
17	O	OT11	47	–	NC	77	IU	CHS1	107	–	NC
18	O	OT12	48	–	NC	78	IU	CHS2	108	–	NC
19	O	OT13	49	IU	IT2	79	IU	CHS3	109	IU	SYNC
20	O	OT14	50	IU	CWCK	80	IU	CHS4	110	ID	VCK
21	–	GND	51	–	GND	81	–	GND	111	–	GND
22	IU	CHEX1	52	IU	CWD7 (MSB)	82	IU	DLY0 (LSB)	112	IU	D2/D1
23	IU	CHEX0	53	IU	CWD6	83	IU	DLY1	113	–	NC
24	IU	AFS	54	IU	CWD5	84	IU	DLY2	114	–	NC
25	IU	LRS	55	IU	CWD4	85	IU	DLY3	115	O	OT15
26	IU	DIR	56	IU	CWD3	86	IU	DLY4 (MSB)	116	O	OT16
27	IU	20/16	57	IU	CWD2	87	–	NC	117	O	OT17
28	IU	ZCS	58	IU	CWD1	88	O	AUXT	118	O	OT18
29	ID	Z3/4	59	IU	CWD0 (LSB)	89	O	UDT	119	O	OT19
30	ID	Z1/2	60	–	VDD	90	O	ADFT	120	–	VDD

IU ; INPUT WITH PULL-UP REGISTER
ID ; INPUT WITH PULL-DOWN REGISTER
OT ; TRI-STATE OUTPUT



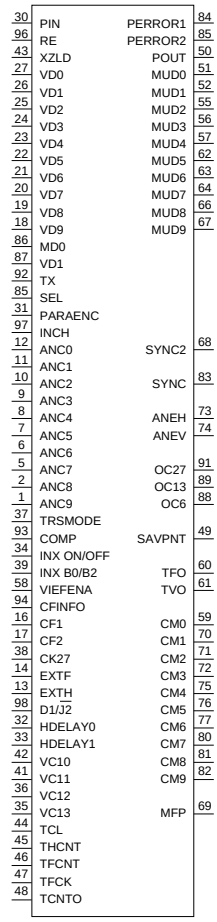
CXD8385Q(SONY)

C-MOS ENCODER
—TOP VIEW—



(V_{DD} = + 5 V)

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	I	ANC9	26	I	VD1	51	O	MUD0	76	O	CM5
2	I	ANC8	27	I	VD0	52	O	MUD1	77	O	CM6
3	—	V_{DD}	28	—	V_{DD}	53	—	V_{DD}	78	—	V_{DD}
4	—	GND	29	—	GND	54	—	GND	79	—	GND
5	I	ANC7	30	I	PIN	55	O	MUD2	80	O	CM7
6	I	ANC6	31	I	PARAENC	56	O	MUD3	81	O	CM8
7	I	ANC5	32	I	HDELAY0	57	O	MUD4	82	O	CM9
8	I	ANC4	33	I	HDELAY1	58	I	VIEFENA	83	O	CYNC
9	I	ANC3	34	I	INX ON/OFF	59	O	CMO	84	O	PERROR1
10	I	ANC2	35	I	VC13	60	O	TFO	85	O	PERROR2
11	I	ANC1	36	I	VC12	61	O	TVO	86	I	MD0
12	I	ANC0	37	I	TRS MODE	62	O	MUD5	87	I	MD1
13	I	EXTH	38	I	CK27	63	O	MUD6	88	O	OC6
14	I	EXTF	39	I	INX B0/B2	64	O	MUD7	89	O	OC13
15	—	GND	40	—	GND	65	—	GND	90	—	GND
16	I	CF1	41	I	VC11	66	O	MUD8	91	O	OC27
17	I	CF2	42	I	VC10	67	O	MUD9	92	I	TX
18	I	VD9	43	I	XZLD	68	O	SYNC2	93	I	COMP
19	I	VD8	44	I	TCL	69	O	MFP	94	I	CFINFO
20	I	VD7	45	I	THCNT	70	O	CM1	95	I	SEL
21	I	VD6	46	I	TFCNT	71	O	CM2	96	I	RE
22	I	VD5	47	I	TFCK	72	O	CM3	97	I	INCH
23	I	VD4	48	I	TCNTO	73	O	ANEH	98	I	D1/$\overline{J2}$
24	I	VD3	49	O	SAVPNT	74	O	ANEV	99	I	SLNP
25	I	VD2	50	O	POUT	75	O	CM4	100	I	ANIS

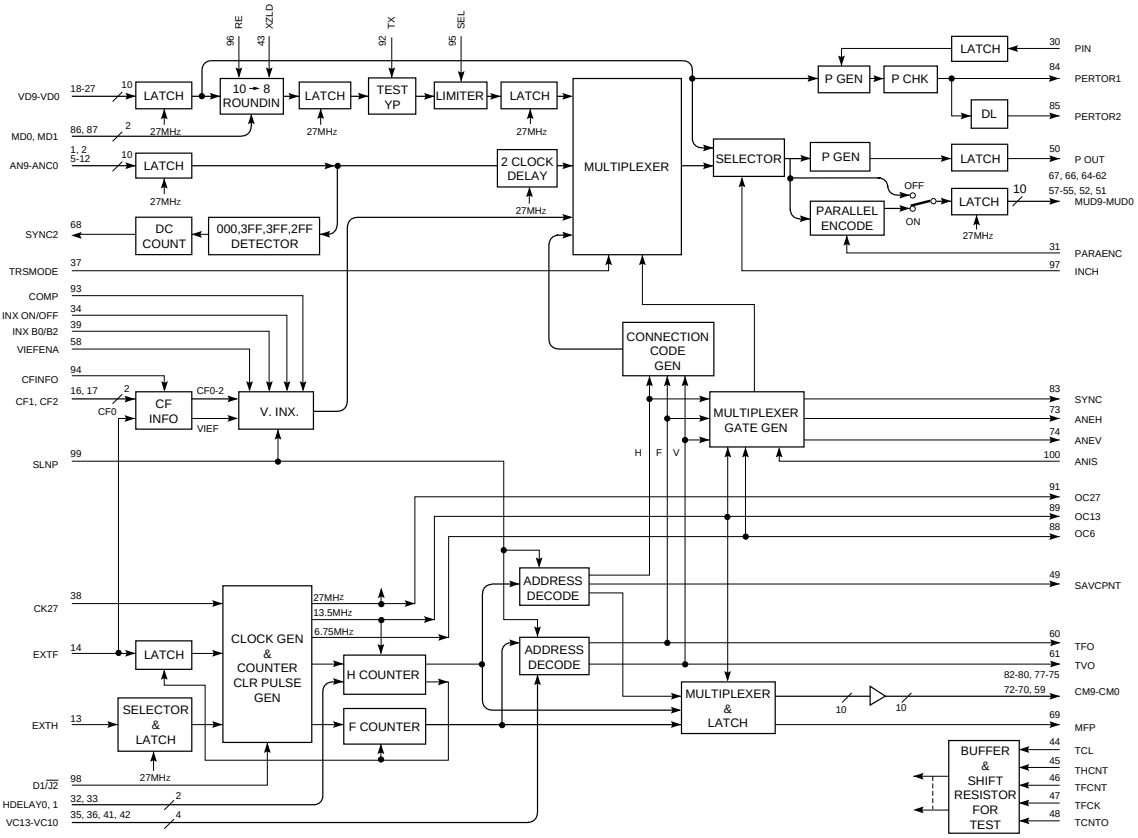


INPUT

ANC0-ANC9	;	ANCILLARY DATA
ANIS	;	ANC GATE CONTROL
CF1/CF2	;	CF DATA
CFINFO	;	CFINFO CONTROL
CK27	;	27 MHz CLOCK
COMP	;	COMPOSIT/COMPONENT
D1/J2,SLNP	;	MODE CONTROL
EXTF	;	REF F
EXTH	;	REF H
HDELAY0,HDELAY1	;	JZ REF H TRS ADVANCE CONTROL
INCH,TCL,TCNTO,TFCK,TFCNT,THCNT,XZLD	;	TEST PIN
INX ON/OFF,INX B0/B2VIEFENA	;	V.INX.CONTROL
PARAENC	;	SCRAMBLE NRZ CONVERT ON/OFF
PIN	;	PARITY
RE	;	RAUND CONTROL
TRSMODE	;	TRS 10-BIT/8-BIT SELECT
TX	;	TEST PIN
VC10-VC13	;	525/60 V BLANK CONTROL
VD0-VD9	;	VIDEO DATA

OUTPUT

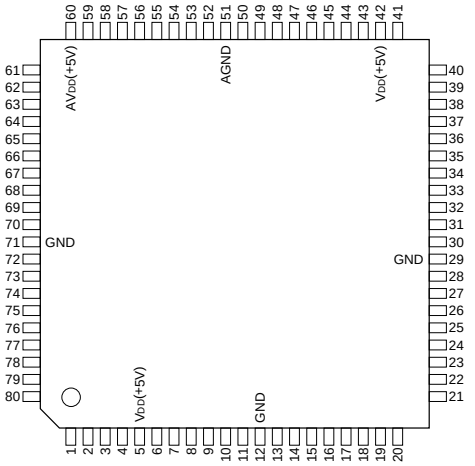
ANEH,ANEV	;	PULSE
CM0-CM9	;	H,F COUNTER
MFP	;	MULTIPLEX F COUNTER PULSE
MUD0-MUD9	;	VIDEO DATA
OC13	;	13.5 MHz CLOCK
OC27	;	27 MHz CLOCK
OC6	;	6.75MHz CLOCK
PERROR1,PERROR2	;	PARITY ERROR DETECT
POUT	;	PARITY
SAVPNT	;	SAV PULSE
SYNC,SYNC2	;	TIMING PULSE
TFO	;	F MONITOR
TVO	;	V MONITOR

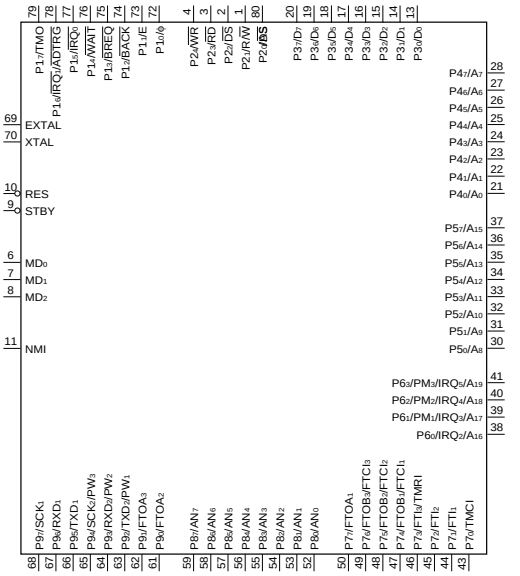


HD6435348RA00F(HITACHI)

C-MOS 8-BIT 1-CHP MICROCOMPUTER

-TOP VIEW-





AVDD, VDD = (+5V)

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	I/O	P21/R/$\overline{W}$	41	I/O	P63/PM3/$\overline{IRQ_5}$/A19
2	I/O	P22/$\overline{DS}$	42	–	V_{DD}
3	I/O	P23/$\overline{RD}$	43	I/O	P70/TMCI
4	I/O	P24/$\overline{WR}$	44	I/O	P71/FTI1
5	–	V_{DD}	45	I/O	P72/FTI2
6	I	MD0	46	I/O	P73/FTI3/TMRI
7	I	MD1	47	I/O	P74/FTOB1/FTCI1
8	I	MD2	48	I/O	P75/FTOB2/FTCI2
9	I	$\overline{STBY}$	49	I/O	P76/FTOB3/FTCI3
10	I	$\overline{RES}$	50	I/O	P77/FTOA1
11	I	NMI	51	–	AGND
12	–	GND	52	I	P80/AN0
13	I/O	P30/D0	53	I	P81/AN1
14	I/O	P31/D1	54	I	P82/AN2
15	I/O	P32/D2	55	I	P83/AN3
16	I/O	P33/D3	56	I	P84/AN4
17	I/O	P34/D4	57	I	P85/AN5
18	I/O	P35/D5	58	I	P86/AN6
19	I/O	P36/D6	59	I	P87/AN7
20	I/O	P37/D7	60	–	AVDD
21	I/O	P40/A0	61	I/O	P90/FTOA2
22	I/O	P41/A1	62	I/O	P91/FTOA3
23	I/O	P42/A2	63	I/O	P92/TXD2/PW1
24	I/O	P43/A3	64	I/O	P93/RXD2/PW2
25	I/O	P44/A4	65	I/O	P94/SCK2/PW3
26	I/O	P45/A5	66	I/O	P95/TXD1
27	I/O	P46/A6	67	I/O	P96/RXD1
28	I/O	P47/A7	68	I/O	P97/SCK1
29	–	GND	69	I	EXTAL
30	I/O	P50/A8	70	I	XTAL
31	I/O	P51/A9	71	–	GND
32	I/O	P52/A10	72	I/O	P10/ϕ
33	I/O	P53/A11	73	I/O	P11/E
34	I/O	P54/A12	74	I/O	P12/$\overline{BACK}$
35	I/O	P55/A13	75	I/O	P13/$\overline{BREQ}$
36	I/O	P56/A14	76	I/O	P14/$\overline{WAIT}$
37	I/O	P57/A15	77	I/O	P15/$\overline{IRQ0}$
38	I/O	P60/$\overline{IRQ_2}$/A16	78	I/O	P16/$\overline{IRQ1}$/$\overline{ADTRG}$
39	I/O	P61/PM1/$\overline{IRQ_3}$/A17	79	I/O	P17/TMO
40	I/O	P62/PM2/$\overline{IRQ_4}$/A18	80	I/O	P20/$\overline{AS}$

INPUT

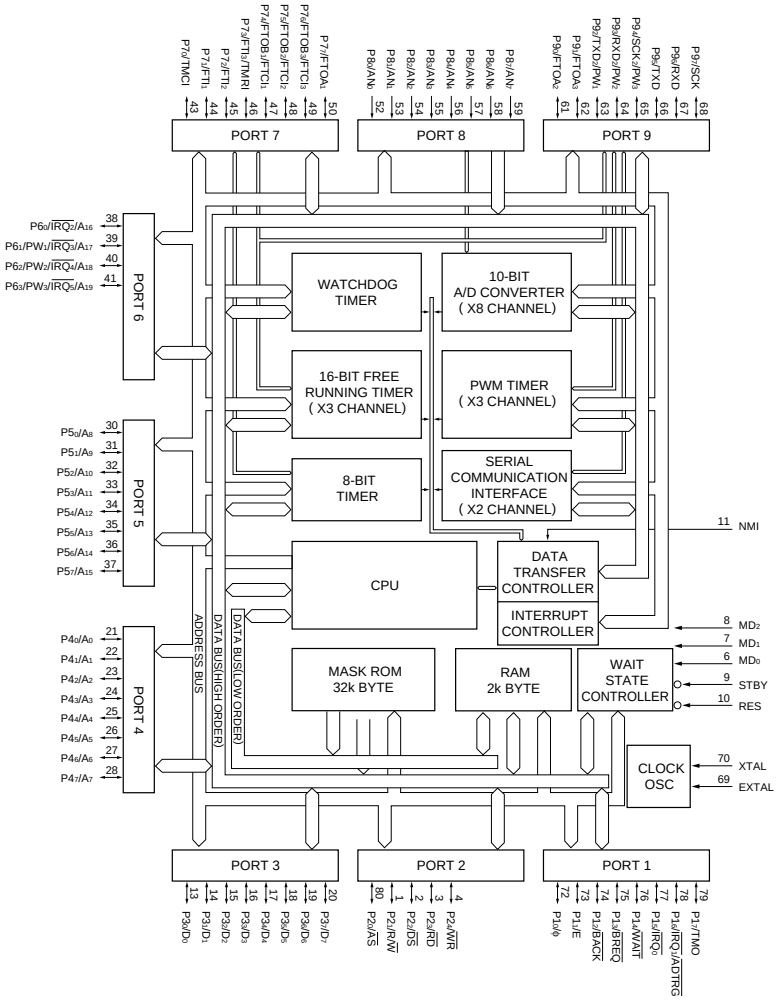
ADTRG	; EXTERNAL TRIGGER
AN0 – AN7	; ANALOG DATA
BREQ	; BUS REQUEST
EXTAL	; CONNECTED TO CRYSTAL OSCILLATOR
FTCI1 – FTCI3	; FRT COUNTER CLOCK (CHANNEL 1 TO 3)
FTI1 – FTI3	; FRT INPUT CAPTURE (CHANNEL 1 TO 3)
IRQ0 – IRQ5	; INTERRUPTION REQUEST 0 AND 1
MD0 – MD2	; MODE SETTING
NMI	; NON MASKABLE INTERRUPTION
P80 – P87	; PORT 8
RES	; RESET
RXD1,2	; RECEIVE DATA
STBY	; STANDBY
TMCI	; 8-BIT TIMER CLOCK
TMRI	; 8-BIT TIMER COUNTER RESET
WAIT	; WAIT
XTAL	; CONNECTED TO CRYSTAL OSCILLATOR

OUTPUT

A0 – A19	; ADDRESS BUS
AS	; ADDRESS STROBE
BACK	; BUS REQUEST ACKNOWLEDGE
DS	; DATA STROBE
E	; ENABLE CLOCK
FTOA1 – FTOA3	; FRT OUTPUT COMPARE A (CHANNEL 1 TO 3)
FTOB1 – FTOB3	; FRT OUTPUT COMPARE B (CHANNEL 1 TO 3)
PW1 – PW3	; PWM TIMER (CHANNEL 1 TO 3)
R/W	; READ/WRITE
RD	; READ
TMO	; 8-BIT TIMER
TXD1,2	; SEND DATA
WR	; WRITE
ϕ	; SYSTEM CLOCK

INPUT/OUTPUT

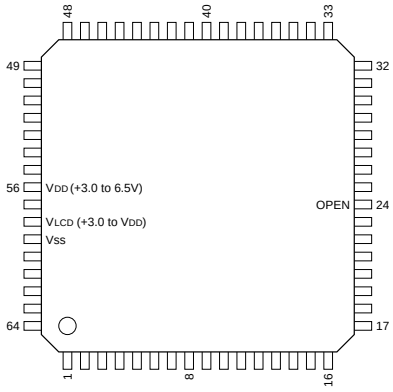
D0 – D7	; DATA BUS
P10 – P17	; PORT 1
P20 – P24	; PORT 2
P30 – P37	; PORT 3
P40 – P47	; PORT 4
P50 – P57	; PORT 5
P60 – P63	; PORT 6
P70 – P77	; PORT 7
P90 – P97	; PORT 9
SCK1,2	; SERIAL CLOCK



LC75821W(SANYO)

LCD DRIVER

- TOP VIEW -



INPUT

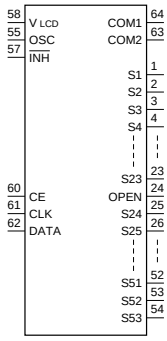
CE	; CHIP ENABLE
CLK	; CLOCK
DATA	; SERIAL DATA
$\overline{INH}$	; DISPLAY INHIBIT
OSC	; OSCILLATOR

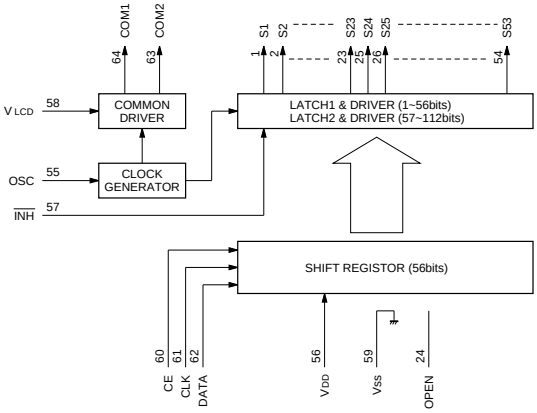
IN/OUT

S1 to S53 ; SEGMENT OUTPUT

OUT

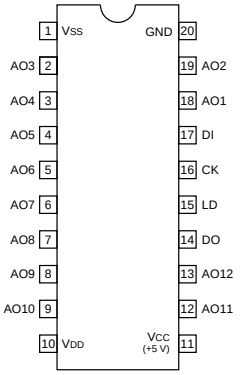
COM1, 2 ; COMMON OUTPUT

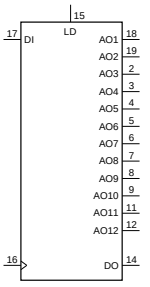




M62352GP(MITSUBISHI)FLAT PACKAGE

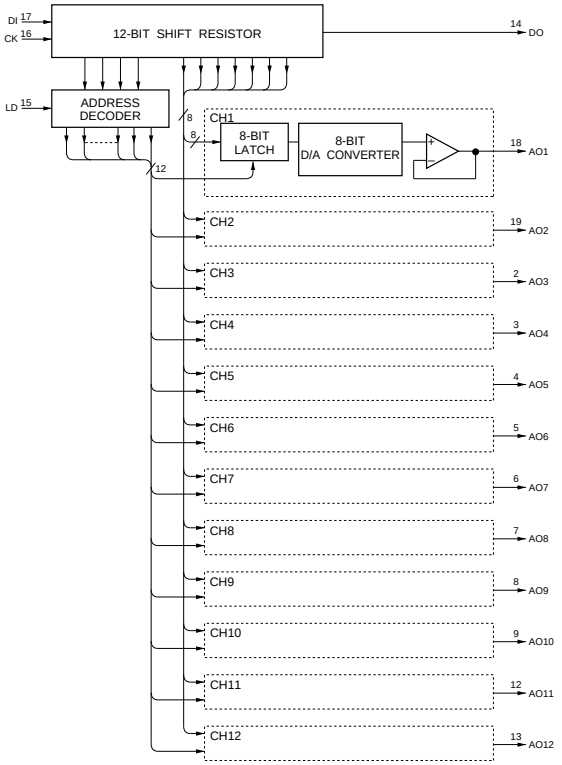
C-MOS 8-BITx12 CHANNEL D/A CONVERTER
(WITH BUFFER OPERATIONAL AMPLIFIER)
— TOP VIEW —





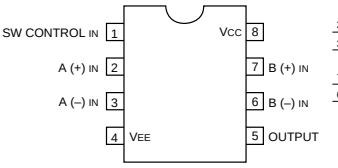
AO1-AO12	; 8-BIT D/A OUTPUTS
CK	; CLOCK INPUT
DI	; SERIAL DATA INPUT
DO	; DATA OUTPUT

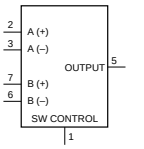
NOTE:
3.5 V < V_{DD} < V_{CC}
–3.5 V < V_{SS} < V_{CC}

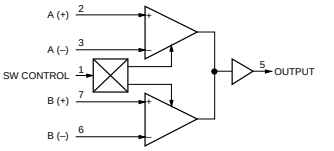


M5201FP(MITSUBISHI)FLAT PACKAGE

DUAL OPERATIONAL AMPLIFIERS WITH SWITCHED OUTPUT
-TOP VIEW-



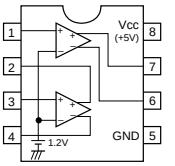




	VCC	VEE
M5201	+ 15V	– 15V
M5203	+ 18V	– 18V

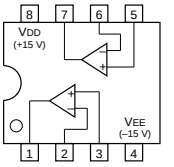
MB3761PF(FUJITSU)FLAT PACKAGE

VOLTAGE DETECTOR
-TOP VIEW-



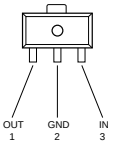
NJM2041M-D(JRC)FLAT PACKAGE
NJM5532M(JRC)FLAT PACKAGE

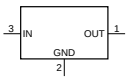
DUAL OPERATIONAL AMPLIFIER
— TOP VIEW —



NJM78L09UA(JRC)+9 V(100 mA)

POSITIVE VOLTAGE REGULATOR
-SIDE VIEW-

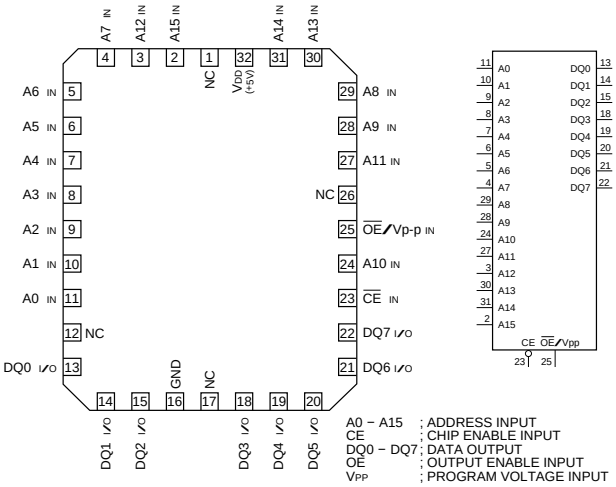




NM27C512V150(NS)

C-MOS 512K (65,536×8)-BIT UV EPROM

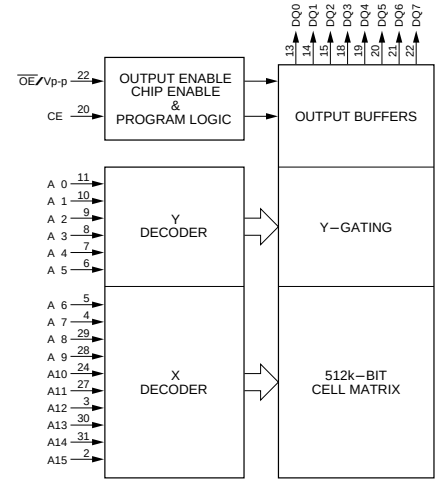
-TOP VIEW-



A0 − A15 ; ADDRESS INPUT
CE ; CHIP ENABLE INPUT
DQ0 − DQ7 ; DATA OUTPUT
OE ; OUTPUT ENABLE INPUT
VPP ; PROGRAM VOLTAGE INPUT

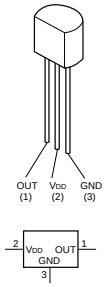
An	CE	OE/VPP	VDD	Dn	FUNCTION
AIN	0	0	+5V	DOUT	READ
AIN	0	1	+5V	HI-Z	OUTPUT DISABLE
x	1	x	+5V	HI-Z	STANDBY
AIN	0	+12.5V	+6V	DIN	PGM
AIN	0	0	+6V	DOUT	PGM VERIFY
x	1	+12.5V	+6V	HI-Z	PGM INH

0 : LOW LEVEL
1 : HIGH LEVEL
x : DON'T CARE
HI-Z: HIGH IMPEDANCE



S-8054HN(SEIKO I AND E)3.80V—4.20V

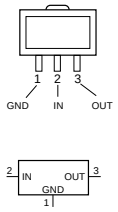
C-MOS VOLTAGE DETECTOR



S-81230AG-RB-S(SEIKO I AND E)+3.0V FLAT PACKAGE

THREE TERMINAL POSITIVE VOLTAGE REGULATOR

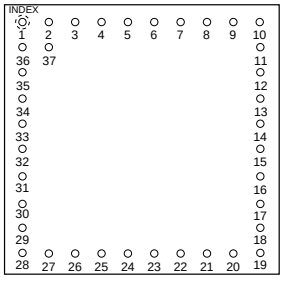
—TOP VIEW—

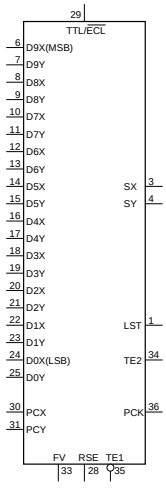


SBX1601A(SONY)

8- OR 10-BIT PARALLEL-TO-SERIAL CONVERTER

-BOTTOM VIEW-





INPUT

D9X – D0X, D9Y – D0Y; PARALLEL DATA INPUTS
PCX, PCY ; PARALLEL CLOCK INPUTS
FV ; VCO FREQ. ADJ. INPUT
RSE ; VCO RANGE SELECT INPUT (H : HIGH RANGE)
TE1 ; TEST TERMINAL (LOW = TEST)
TTL/ECL ; VCC FOR INPUT LEVEL SELECT (+5 V = TTL, GND = ECL)

OUTPUT

LST ; PLL LOCK DETECT OUTPUT (H : LOCK)
PCK ; PARALLEL CLOCK OUTPUT
SX, SY ; SERIAL DATA OUTPUTS
TE2 ; TEST TERMINAL

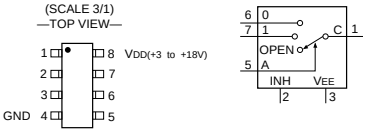
VEE1 = –5 V
VEE2 = –3.5 V

PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	O	LST	11	I	D7Y	21	I	D2Y	31	I	PCY
2	–	GND	12	I	D6X	22	I	D1X	32	–	GND
3	O	SX	13	I	D6Y	23	I	D1Y	33	I	FV
4	O	SY	14	I	D5X	24	I	D0X(LSB)	34	O	TE2
5	–	GND	15	I	D5Y	25	I	D0Y	35	I	TE1
6	I	D9X(MSB)	16	I	D4X	26	–	VEE1	36	O	PCK
7	I	D9Y	17	I	D4Y	27	–	VEE2	37	–	NC
8	I	D8X	18	I	D3X	28	I	RSE			
9	I	D8Y	19	I	D3Y	29	–	TTL/ECL			
10	I	D7X	20	I	D2X	30	I	PCX			

TC4W53F(TOSHIBA)CHIP PACKAGE(5.0 X 3.1)

C-MOS 2-CHANNEL MULTIPLEXER / DEMULTIPLEXER

(SCALE 3/1)
—TOP VIEW—

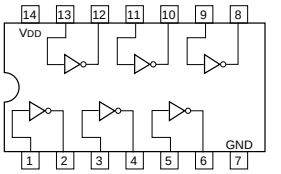


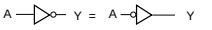
CONT.INPUT		ON
INH	A	CHANNEL
0	0	0
0	1	1
1	X	OPEN

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

TC74VHC04F(TOSHIBA)FLAT PACKAGE

C-MOS HEX INVERTERS
—TOP VIEW—





$Y = \overline{A}$

A	Y
0	1
1	0

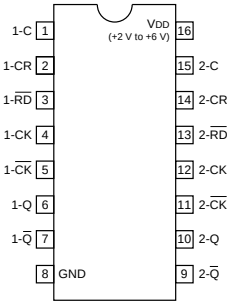
0 ; LOW LEVEL
1 ; HIGH LEVEL

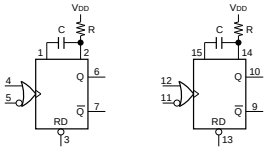
NOTE:

TYPE	VDD
74HCT04 TYPE	+5V
TC74AC04 TYPE TC74VHC04 TYPE	+2 to +5.5V
74ACT04 TYPE	+4.5 to +5.5V
OTHER TYPES	+2 to +6V

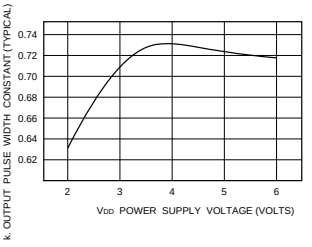
TC74HC4538AFS(TOSHIBA)FLAT PACKAGE

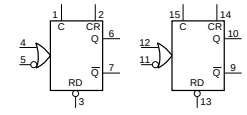
C-MOS DUAL RETRIGGERABLE/NON-RETRIGGERABLE MONOSTABLE MULTIVIBRATOR
— TOP VIEW —



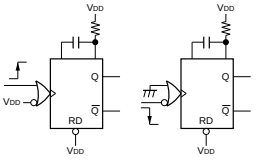


OUTPUT PULSE WIDTH = k · C · R

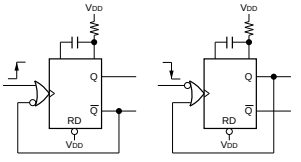




RETRIGGERABLE M. M. V

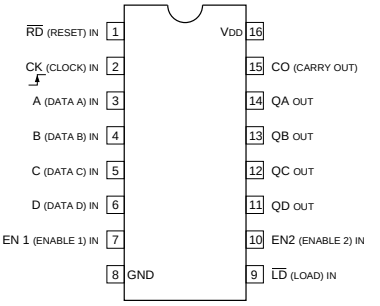


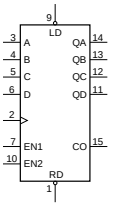
NON-RETRIGGERABLE M. M. V



TC74VHC161F(TOSHIBA) FLAT PACKAGE

C-MOS SYNCHRONOUS PRESETTABLE 4-BIT BINARY COUNTER
-TOP VIEW-





MODE SELECTION

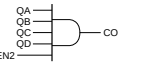
CONTROL INPUTS				MODE
RD	LD	EN1	EN2	
0	X	X	X	RESET (ASYNCHRONOUS)
1	0	X	X	PRESET (SYNCHRONOUS)
1	1	0	X	NO COUNT
1	1	X	0	NO COUNT
1	1	1	1	COUNT

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

COUNT SEQUENCE

COUNT	OUTPUTS			
	QD	QC	QB	QA
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
10	1	0	1	0
11	1	0	1	1
12	1	1	0	0
13	1	1	0	1
14	1	1	1	0
15	1	1	1	1

CARRY OUTPUT "CO"



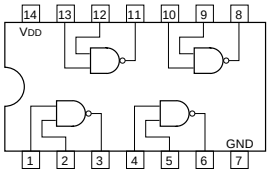
CO IS HIGH WHEN EN2 INPUT IS HIGH AND COUNT IS "15".

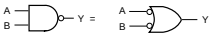
NOTE :

TYPE	VDD
74ACT	+5 V
TC40H	+2 to +8 V
OTHERS	+2 to +6 V

TC74VHC00F(TOSHIBA)FLAT PACKAGE
TC74VHC00FS(EL)(TOSHIBA)FLAT PACKAGE(SMALL)

C-MOS QUAD 2-INPUT NAND GATES
—TOP VIEW—





$Y = \overline{A \cdot B} = \overline{A} + \overline{B}$

A	B	Y
0	0	1
0	1	1
1	0	1
1	1	0

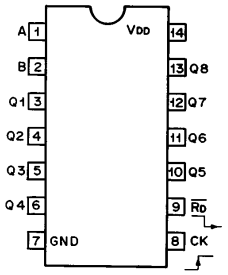
0 ; LOW LEVEL
1 ; HIGH LEVEL

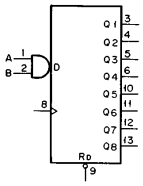
NOTE:

TYPE	VDD
TC74AC00 TYPE TC74VHC00	+2 to +5.5V
MC74HCT00N	+5V
74ACT00 TYPE	+4.5 to +5.5V
OTHER TYPES	+2 to +6V

TC74VHC164F(TOSHIBA)FLAT PACKAGE

C-MOS 8-BIT SERIAL-IN/PARALLEL-OUT SHIFT REGISTER
– TOP VIEW –



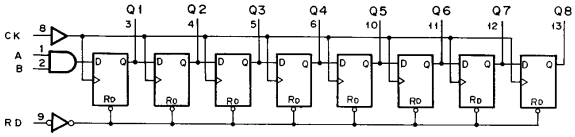


INPUTS				OUTPUTS			
RD	CK	A	B	Q1	Q2	----	Q8
0	X	X	X	0	0	0	0
1	0	X	X	Q1o	Q2o	----	Q8o
1	↑	1	1	1	Q1n	----	Q7n
1	↑	0	X	0	Q1n	----	Q7n
1	↑	X	0	0	Q1n	----	Q7n

0;LOW LEVEL
1;HIGH LEVEL
X;DON'T CARE

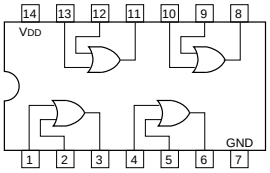
NOTE :

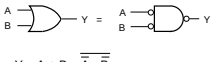
TYPE	VDD
AC/VHC	+2 to +5.5V
HC	+2 to +6V
HCT	+5V



TC74VHC32F(TOSHIBA)FLAT PACKAGE

C-MOS QUAD 2-INPUT OR GATES
—TOP VIEW—





$Y = A + B = \overline{\overline{A} \cdot \overline{B}}$

A	B	Y
0	0	0
0	1	1
1	0	1
1	1	1

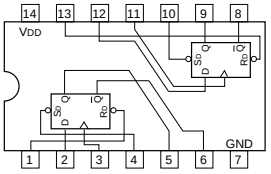
0 ; LOW LEVEL
1 ; HIGH LEVEL

NOTE:

TYPE	VDD
AC/VHC	+2 to +5.5V
HC	+2 to +6V

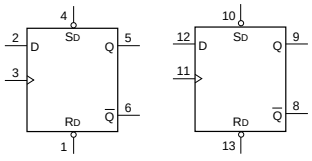
TC74VHC74F(TOSHIBA)FLAT PACKAGE
TC74VHC74FS(EL)(TOSHIBA)FLAT PACKAGE(SMALL)

C-MOS DUAL D-TYPE FLIP-FLOPS WITH DIRECT SET/RESET
—TOP VIEW—



INPUTS				OUTPUTS	
$\overline{SD}$	$\overline{RD}$	CK	D	Qn+1	$\overline{Qn+1}$
0	1	X	X	1	0
1	0	X	X	0	1
0	0	X	X	1	1
1	1	↑	1	1	0
1	1	↑	0	0	1
1	1	0	X	Qn	$\overline{Qn}$

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

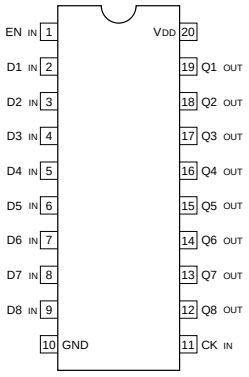


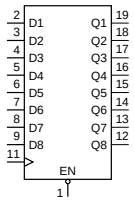
NOTE:

TYPE	VDD
HCT/ACT	+5V
TC74AC/VHC	+2 to +5.5V
OTHERS	+2 to +6V

TC74VHC574FS(EL)(TOSHIBA)FLAT PACKAGE(SMALL)

C-MOS 3-STATE D-TYPE EDGE-TRIGGERED FLIP-FLOP
—TOP VIEW—

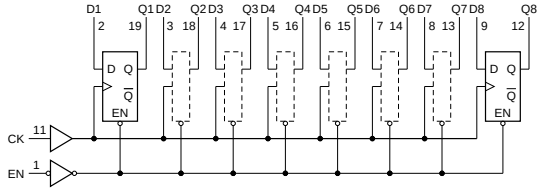




EACH FLIP-FLOP

INPUTS			OUT
EN	CK	D	Q
0	↑	1	1
0	↑	0	0
0	↓	X	Q0
1	X	X	HI-Z

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z ; HIGH IMPEDANCE
Q0 ; NO CHANGE

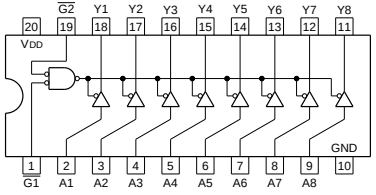


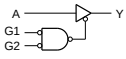
NOTE;

TYPE	VDD
HC	+2 to +6V
AC/VHC	+2 to +5.5V
ACT/FCT/HCT	+5V

TC74VHCT541FS(TOSHIBA)FLAT PACKAGE

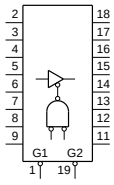
C-MOS BUFFERS AND LINE DRIVERS WITH 3-STATE OUTPUTS
- TOP VIEW -





G1	G2	A	Y
0	0	0	1
0	0	1	0
1	X	X	HI-Z
X	1	X	HI-Z

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z ; HIGH IMPEDANCE

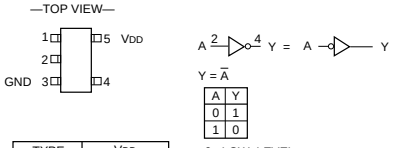


NOTE :

TYPE	VDD
TC74AC/TC74VHC	+2 to +5.5V
ABT/ACT/BCT/HCT/VHCT	+5V
OTHER TYPES	+2 to +6V

TC7SH04FU(TOSHIBA)CHIP PACKAGE

C-MOS INVERTER



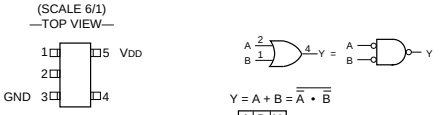
A	Y
0	1
1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL

TYPE	VDD
7S04F 7SU04F	+2 to +6V
4S69F 4SU69F	+3 to +18V
7SH04FU	+2 to +5.5V

TC7SH32FU(TOSHIBA)CHIP PACKAGE

C-MOS 2-INPUT OR GATE



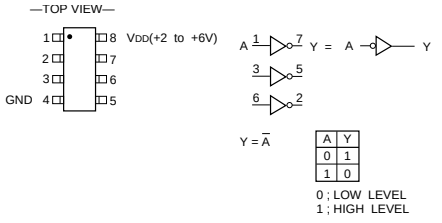
A	B	Y
0	0	0
0	1	1
1	0	1
1	1	1

0 ; LOW LEVEL
1 ; HIGH LEVEL

TYPE	VDD
7S32F 7S32FU	+2 to +6V
4S71F	+3 to +18V
7SH32FU	–2 to +5.5V

TC7W04FU(TOSHIBA)CHIP PACKAGE

C-MOS HEX INVERTERS

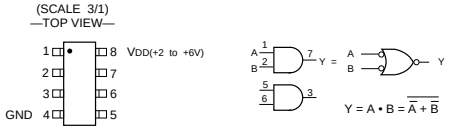


A	Y
0	1
1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL

TC7W08FU(TOSHIBA)CHIP PACKAGE

C-MOS 2-INPUT AND GATE

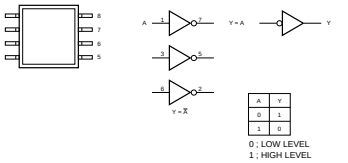


A	B	Y
0	0	0
0	1	0
1	0	0
1	1	1

0 ; LOW LEVEL
1 ; HIGH LEVEL

TC7W14FU(TOSHIBA)CHIP PACKAGE

C-MOS HEX INVERTERS
-TOP VIEW-

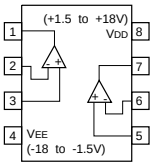


A	Y
0	1
1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL

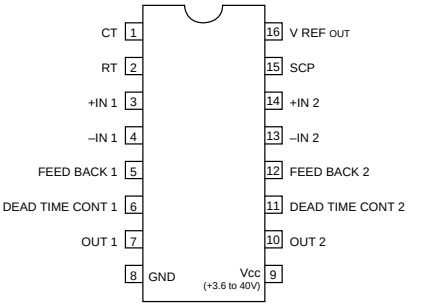
TL072CPS(TI)FLAT PACKAGE

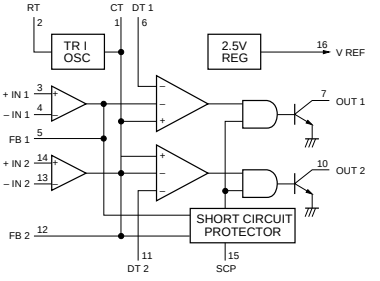
OPRATIONAL AMPLIFER
(J FET INPUT)
—TOP VIEW—



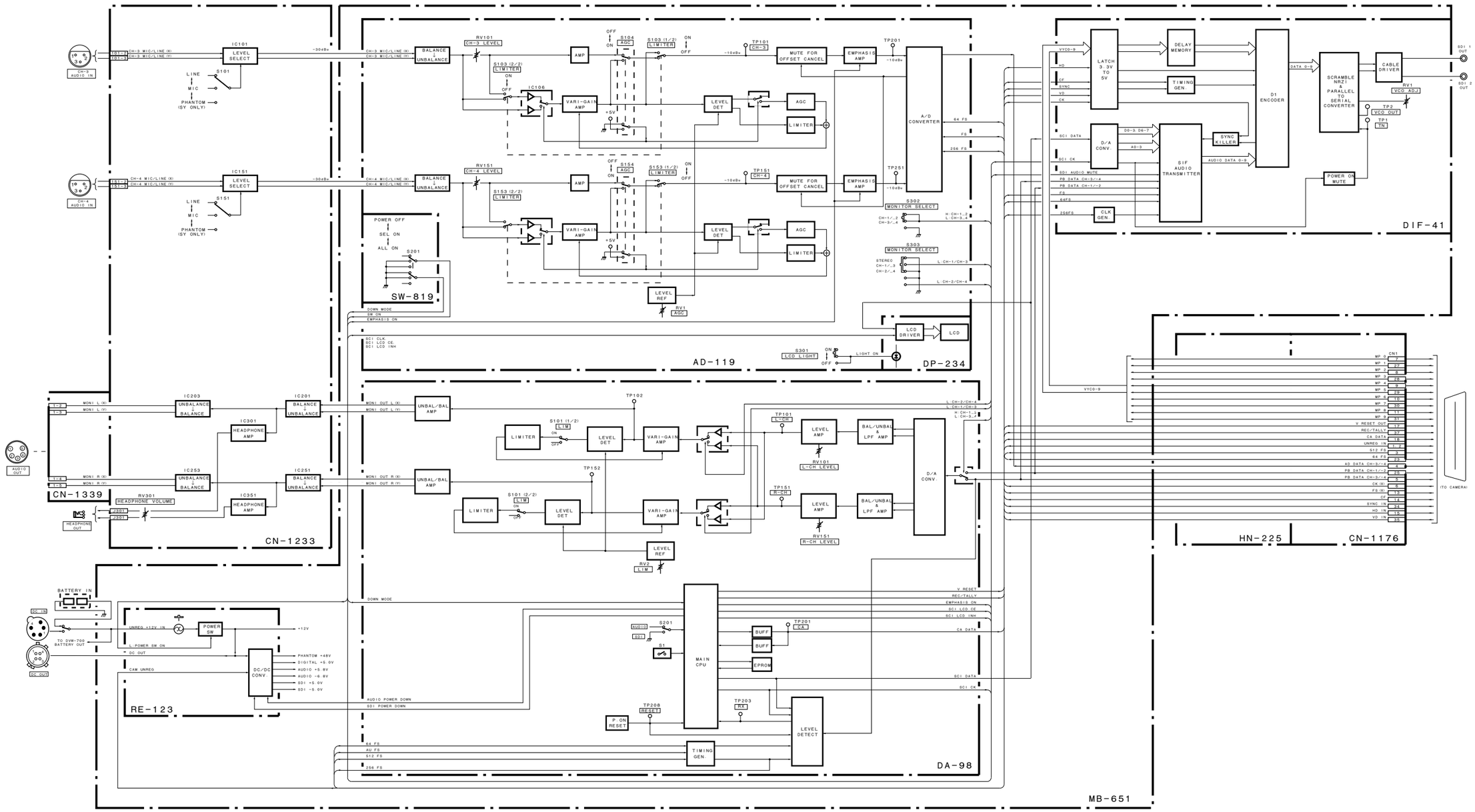
TL1451ACPW(TI)FLAT PACKAGE(SMALL)

DUAL PWM POWER CONTROLLER
-TOP VIEW-



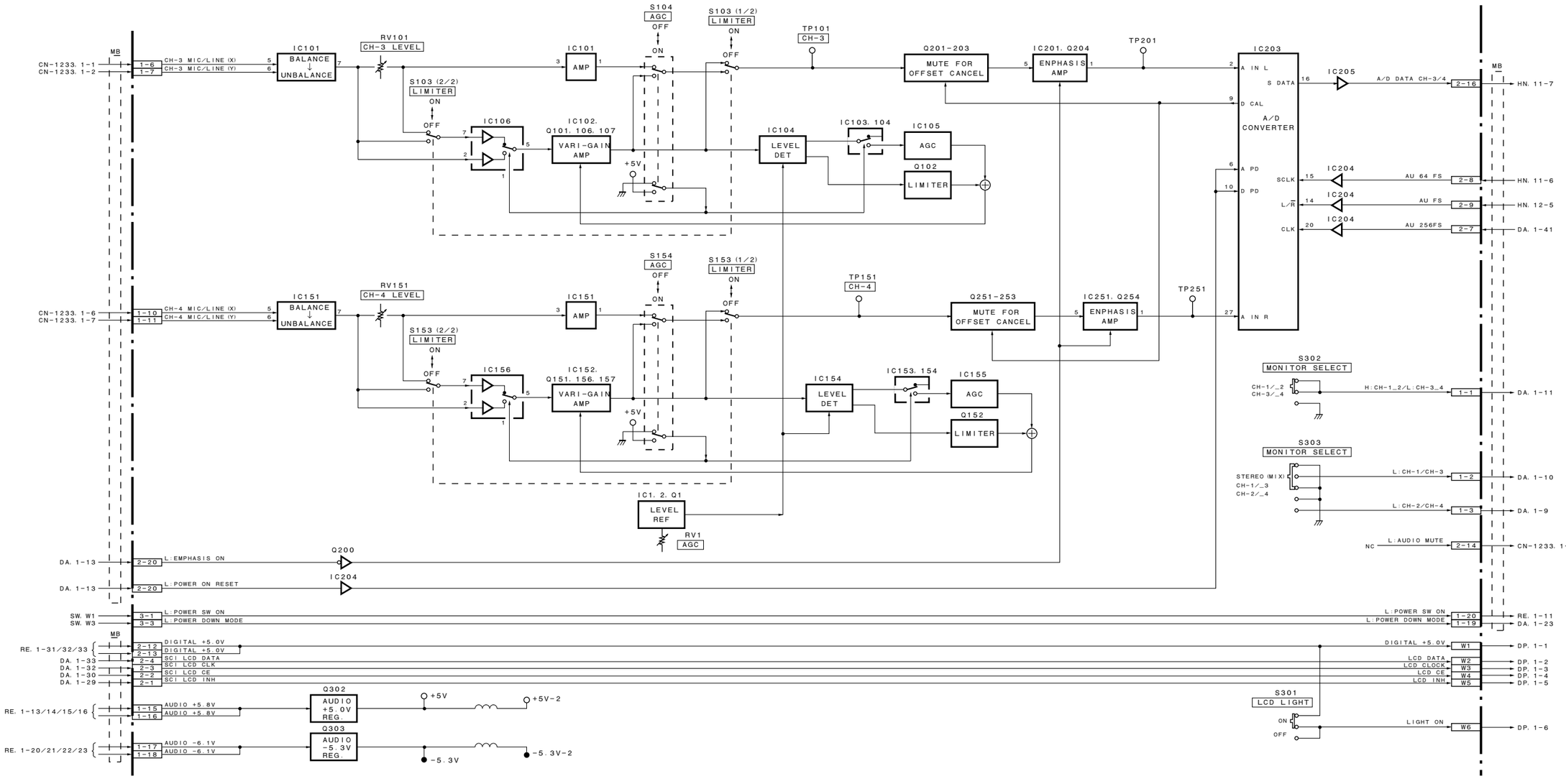


Section 5
Block Diagrams



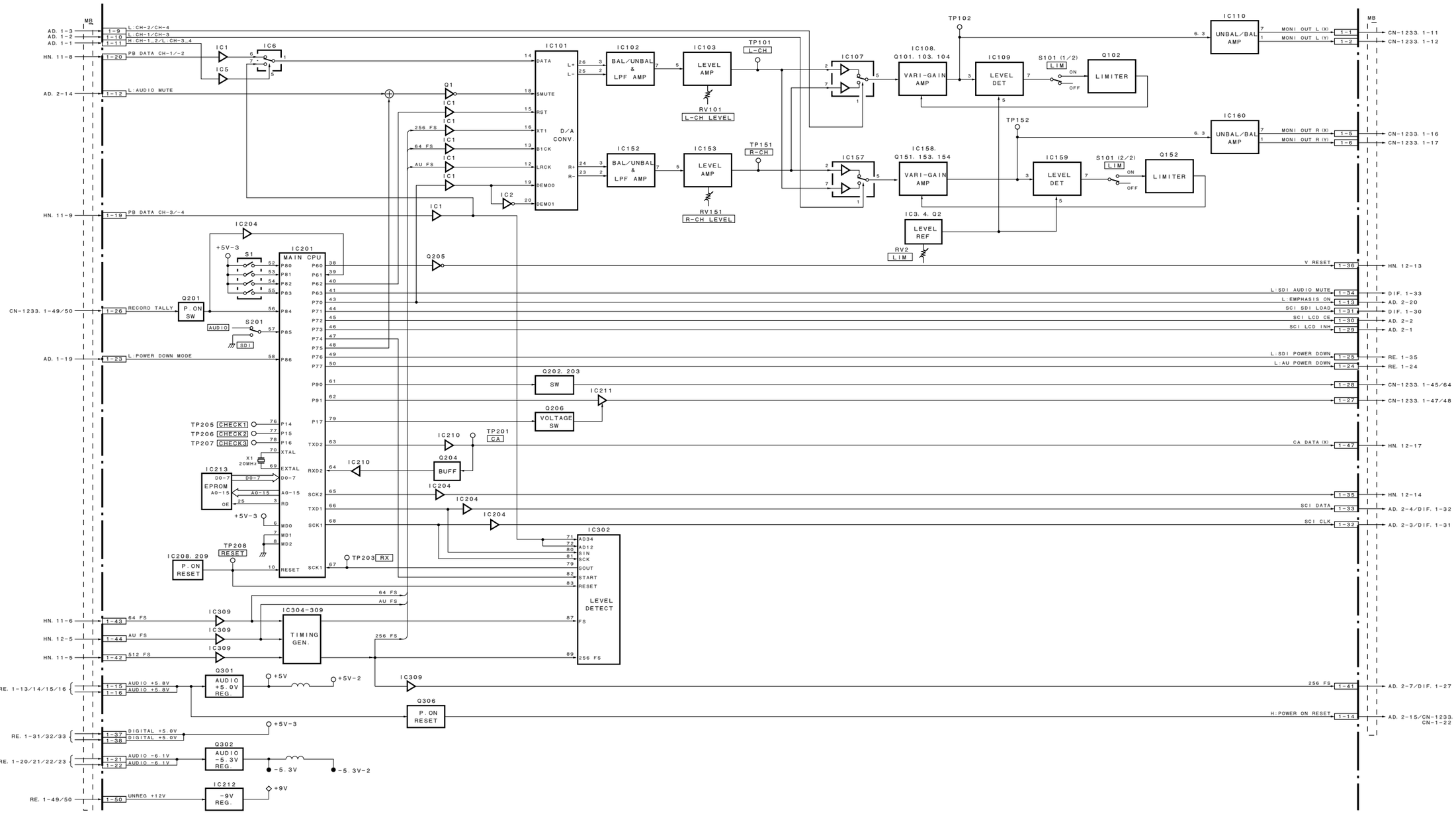
Overall Block

CA-701



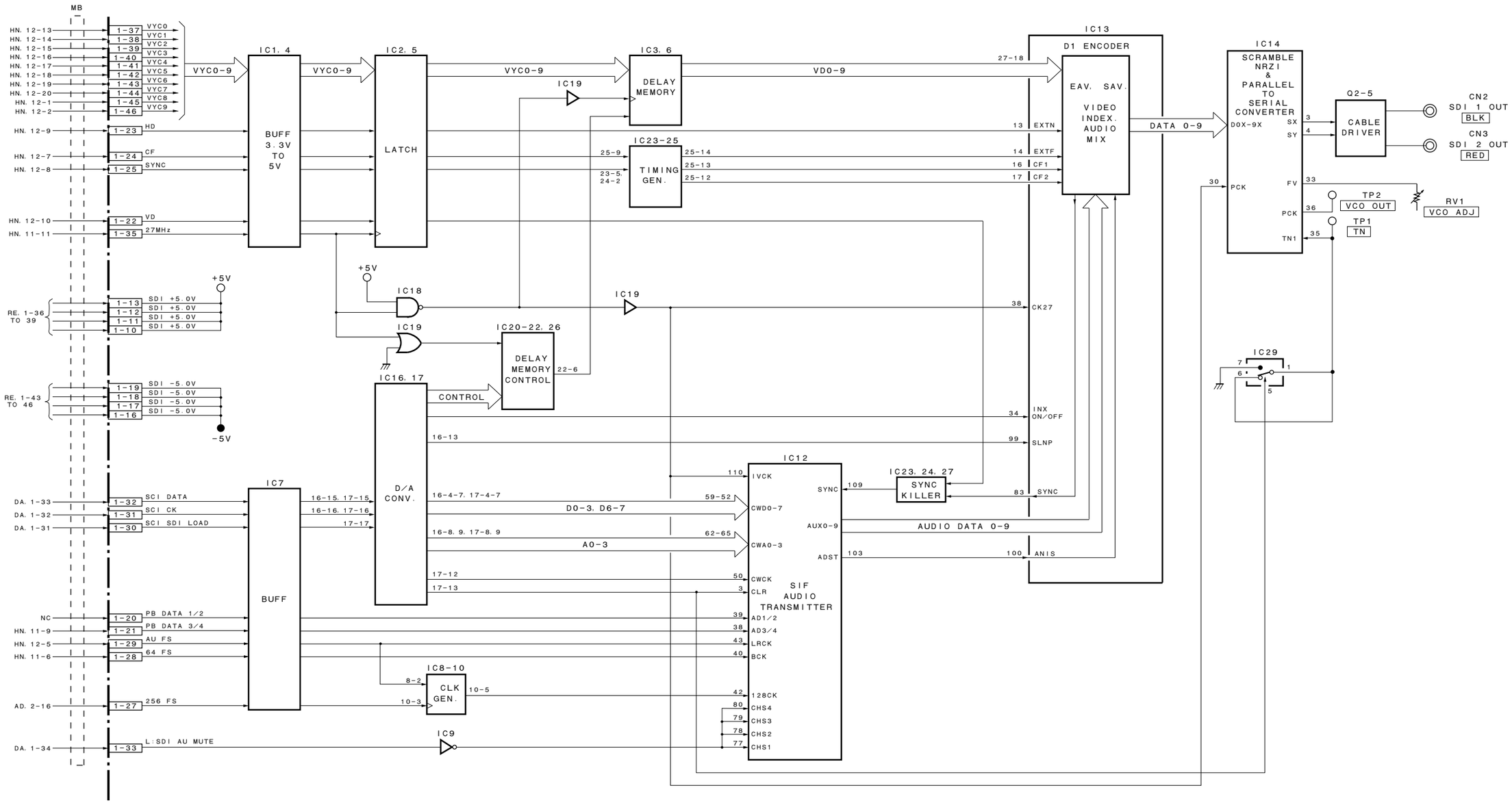
AD-119 Block

CA-701



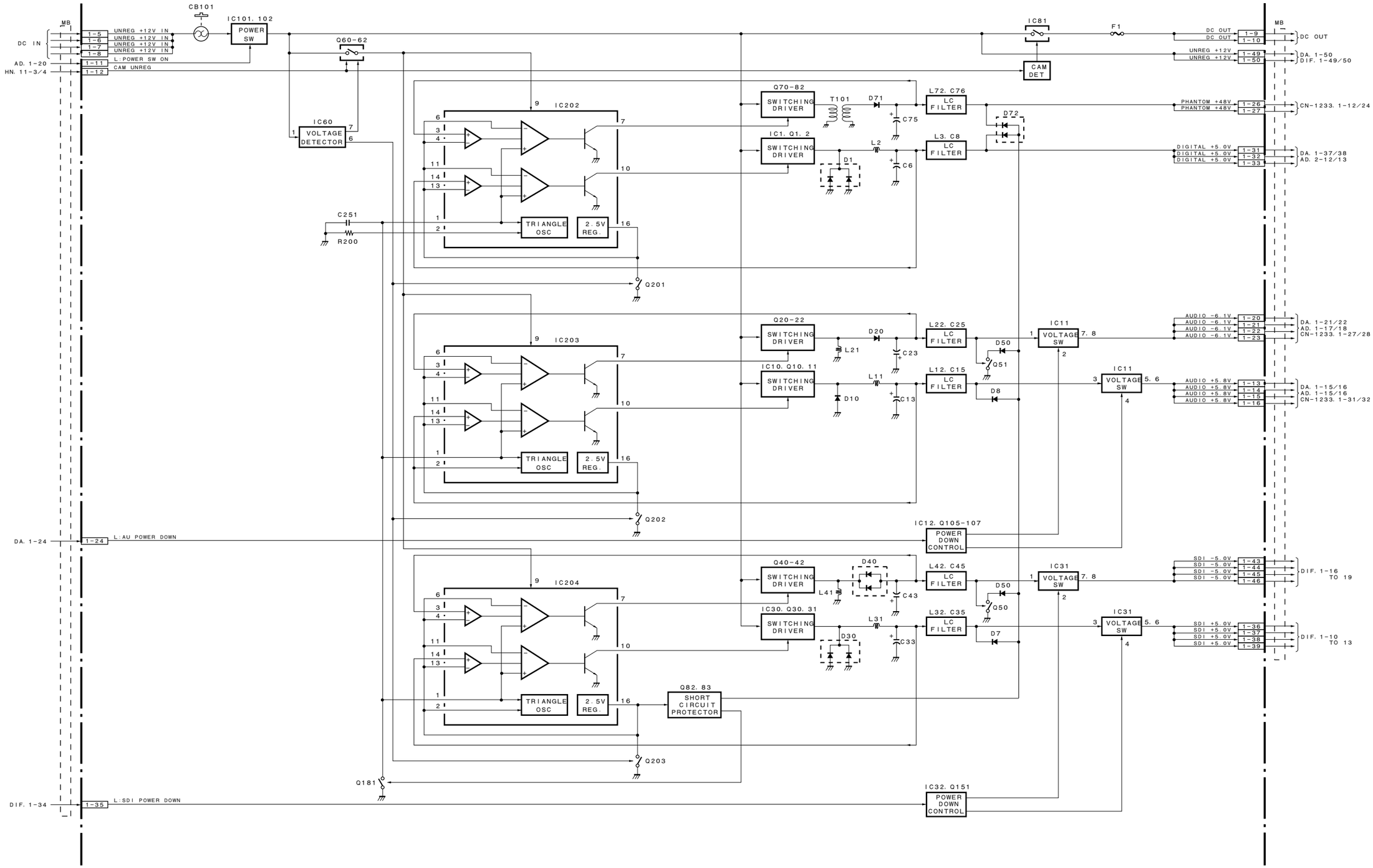
DA-98 Block

CA-701



DIF-41 Block

CA-701

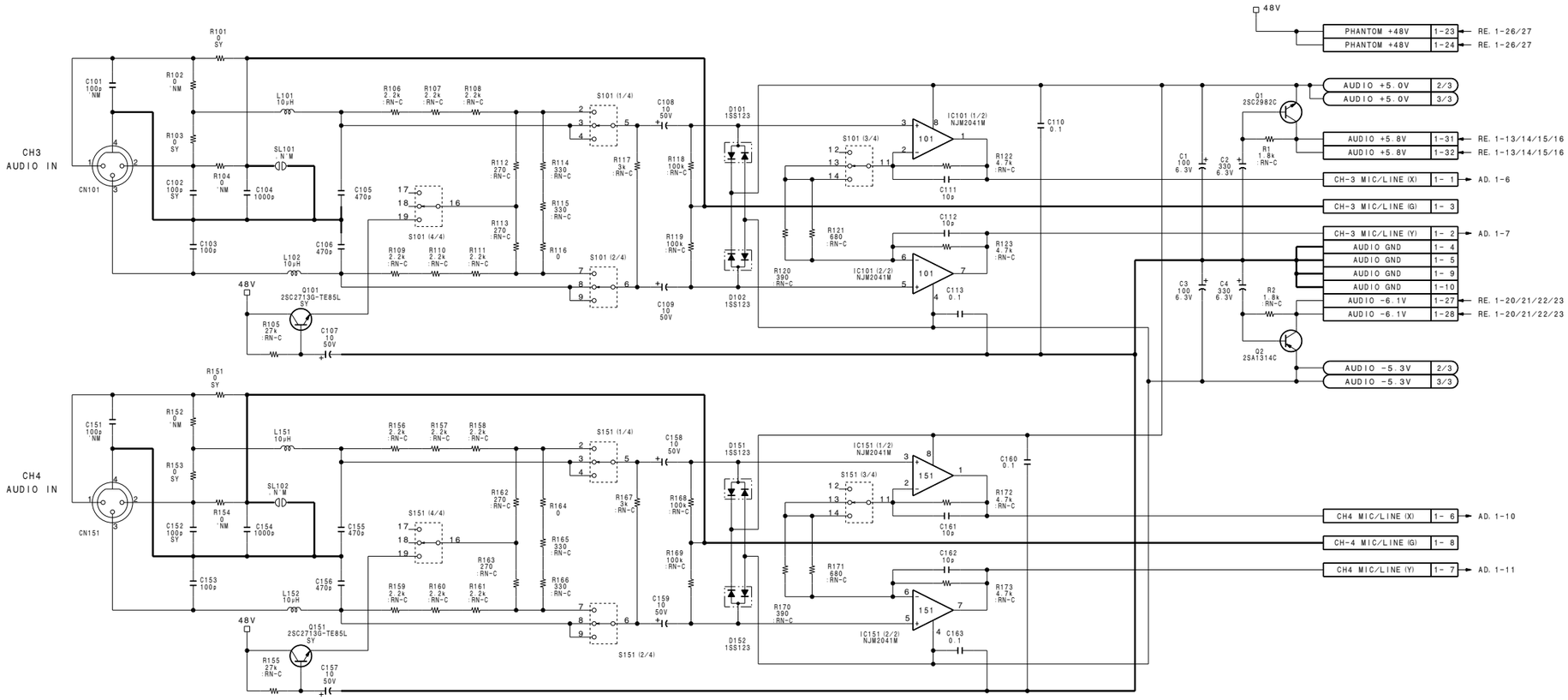


RE-123 Block

CA-701

Section 6
Schematic Diagrams

CA-701 (J)
CA-701 (SY)



	SY	J
R101	0	N'M
R103	0	N'M
R102	N'M	0
R104	N'M	0
R151	0	N'M
R153	0	N'M
R152	N'M	0
R154	N'M	0
C101	N'M	100P
C102	100P	N'M
C151	N'M	100P
C152	100P	N'M
Q101	2CS2713G	N'M
Q151	2SC2713G	N'M
CN101	1-766-386-11	1-766-385-12
CN151	1-766-386-11	1-766-385-12

CN-1233 (1/3)
BOARD NO. 1-659-732-11
LOT NO. 509-
B-¥CA701-CN1233-11

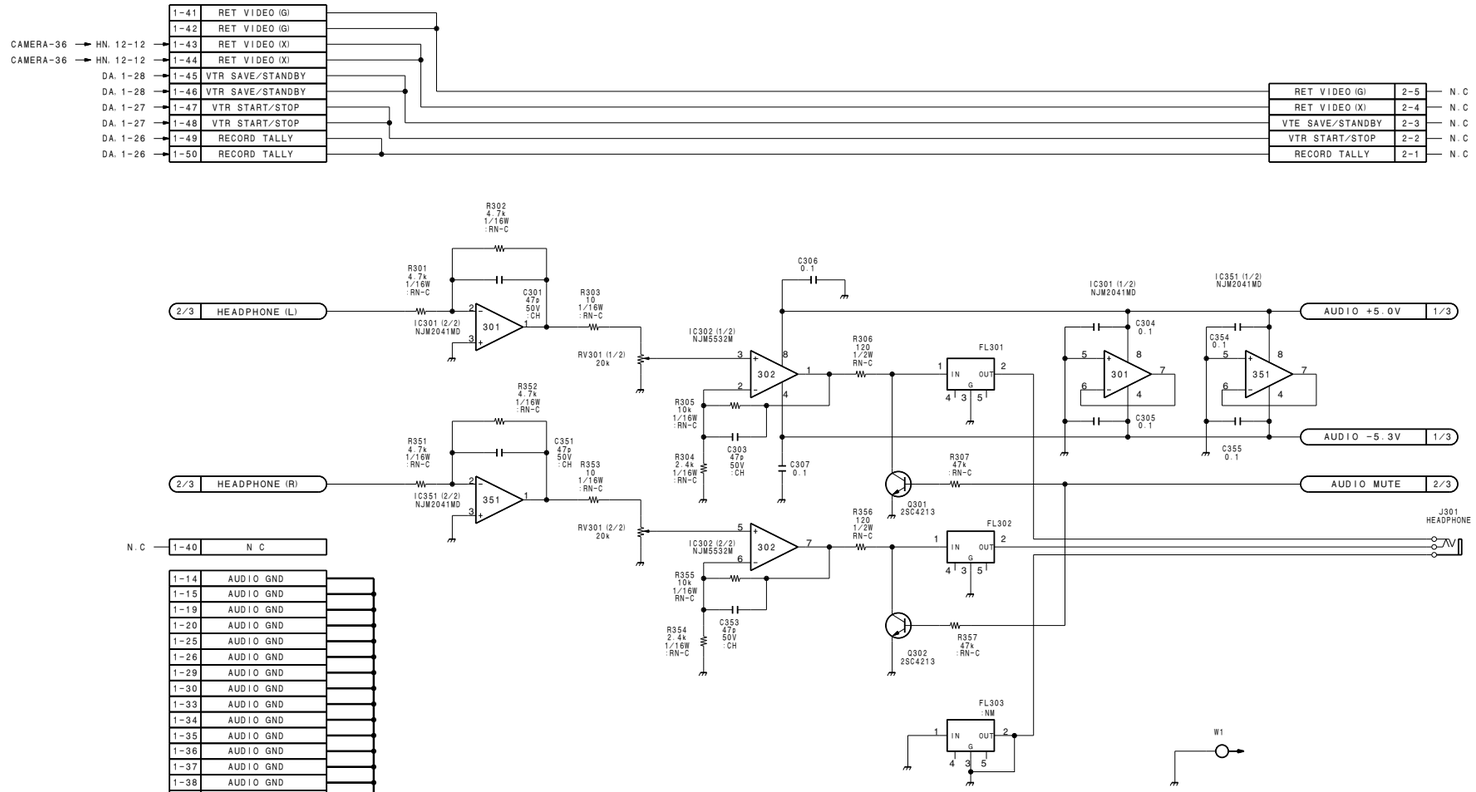
A B C D E F G H
1 2 3 4 5

CA-701 (J)
CA-701 (SY)

CN-1233 (2/3)

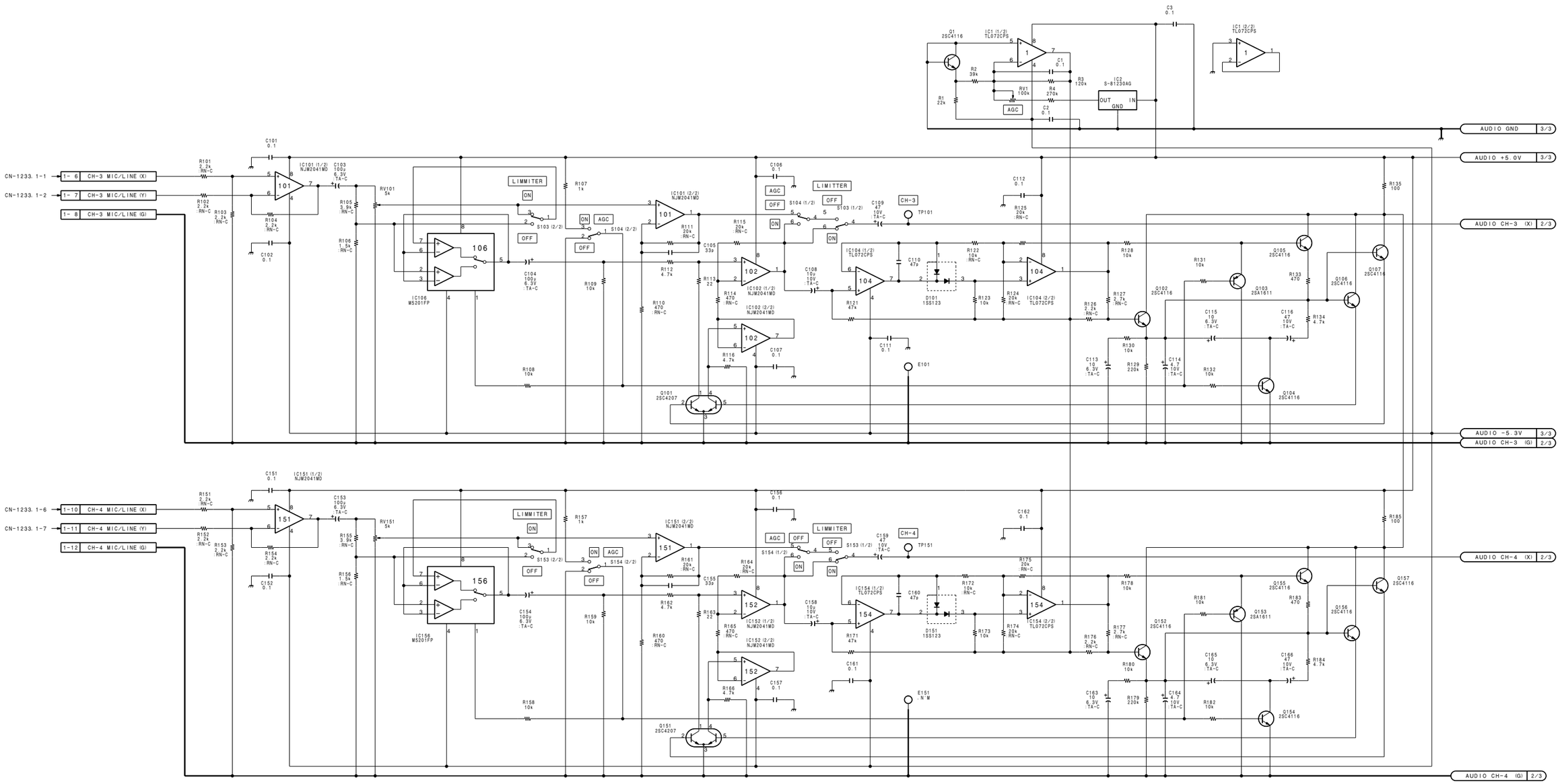
BOARD NO. 1-659-732-11
LOT NO. 509-
B-¥CA701-CN1233-11

CA-701 (J)
CA-701 (SY)



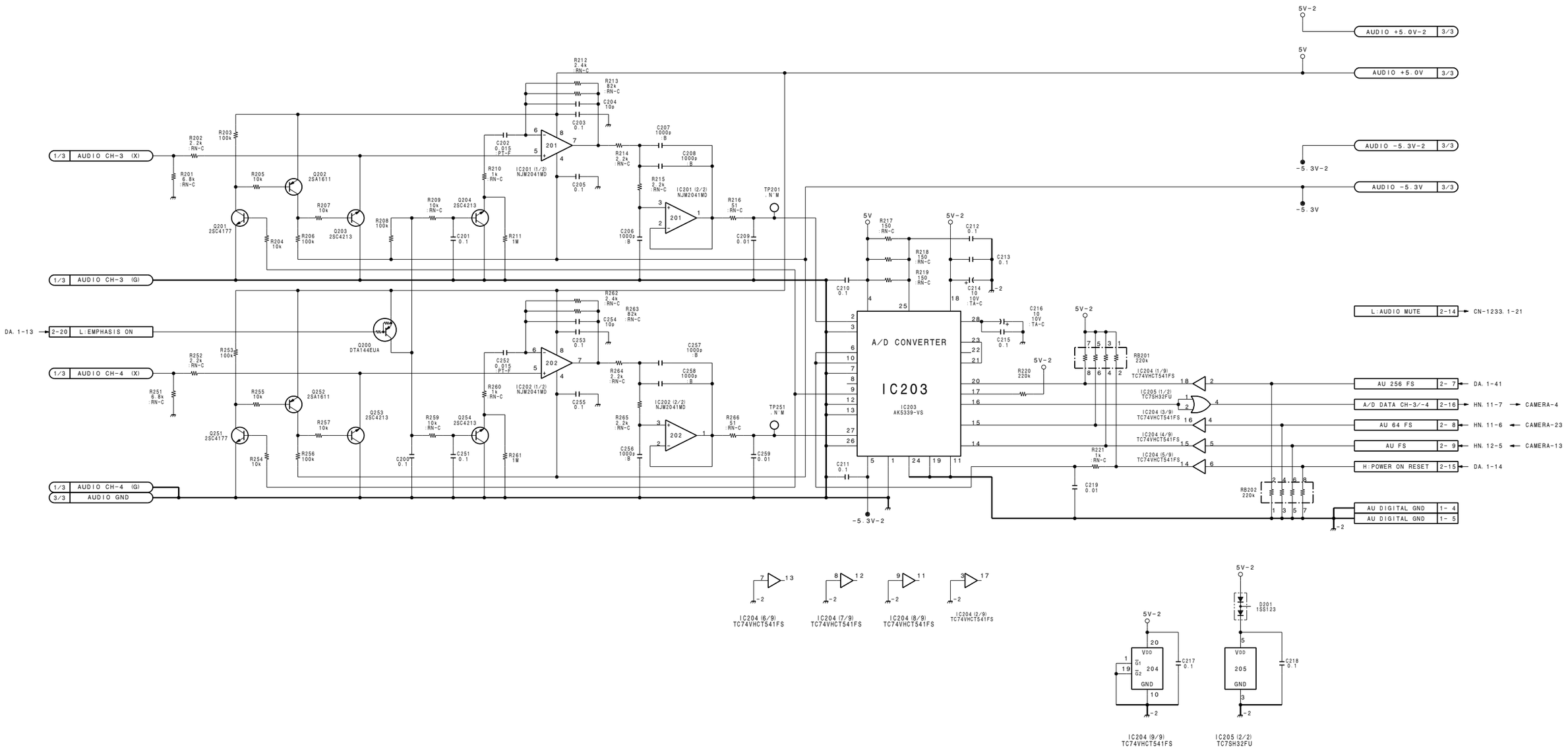
CN-1233 (3/3)
BOARD NO. 1-659-732-11
LOT NO. 509-
B-¥CA701-CN1233-11

CA-701 (J)
CA-701 (SY)



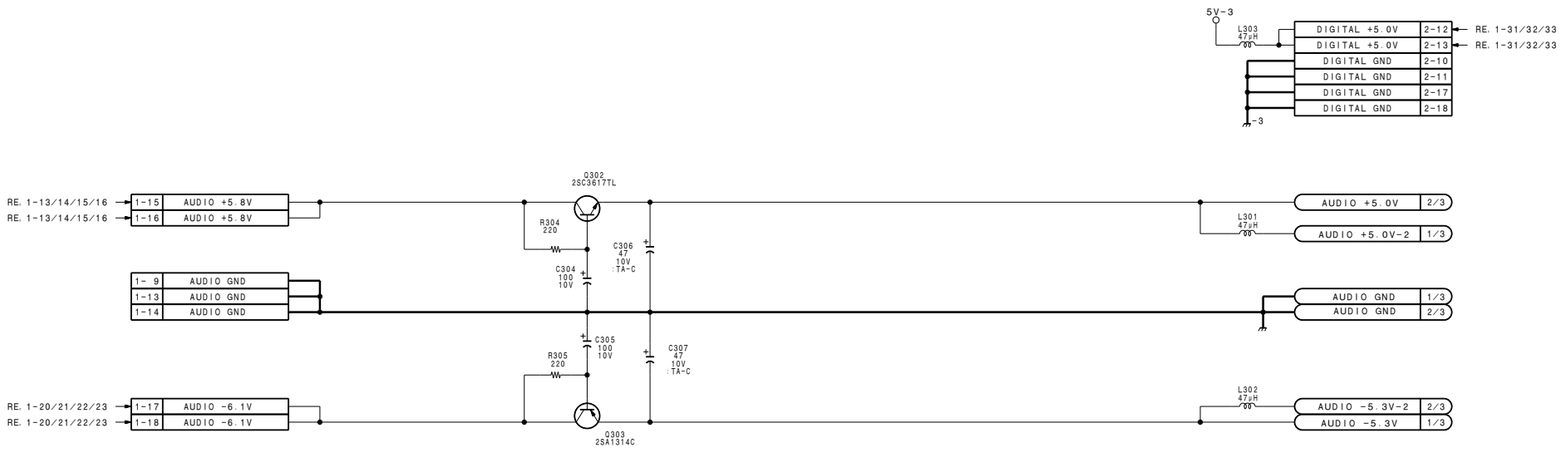
AD-119 (1/3)
BOARD NO. 1-659-727-11
LOT NO. 509-
B-¥CA701-AD119-11

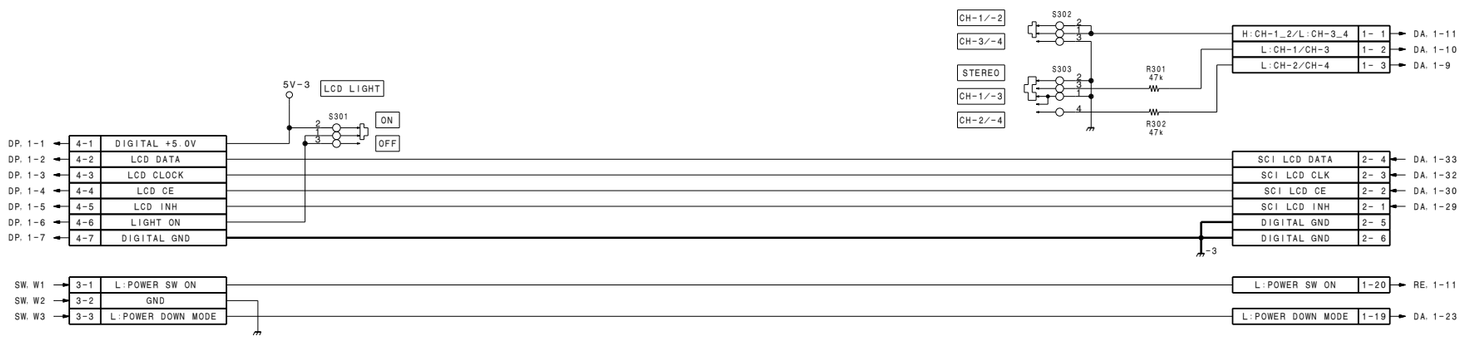
CA-701 (J)
CA-701 (SY)



AD-119 (2/3)
BOARD NO. 1-659-727-11
LOT NO. 509-
B-¥CA701-AD119-11

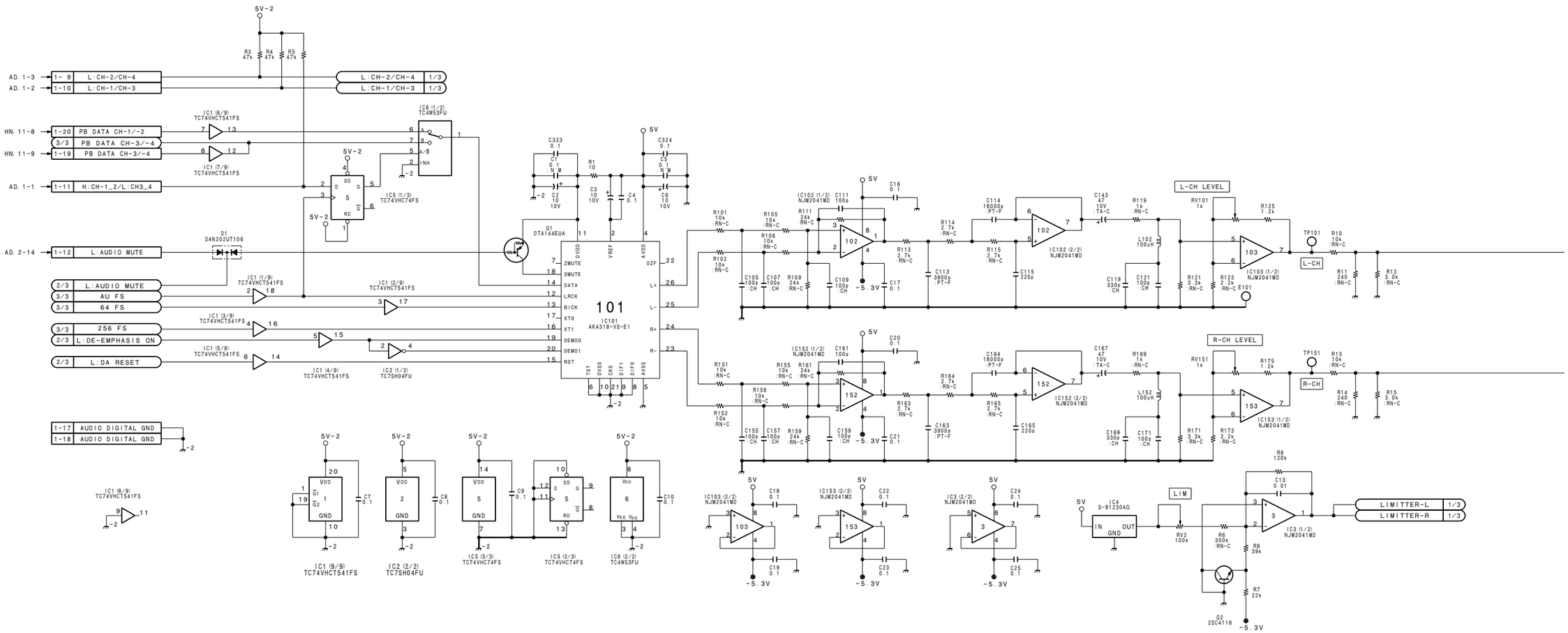
CA-701 (J)
CA-701 (SY)



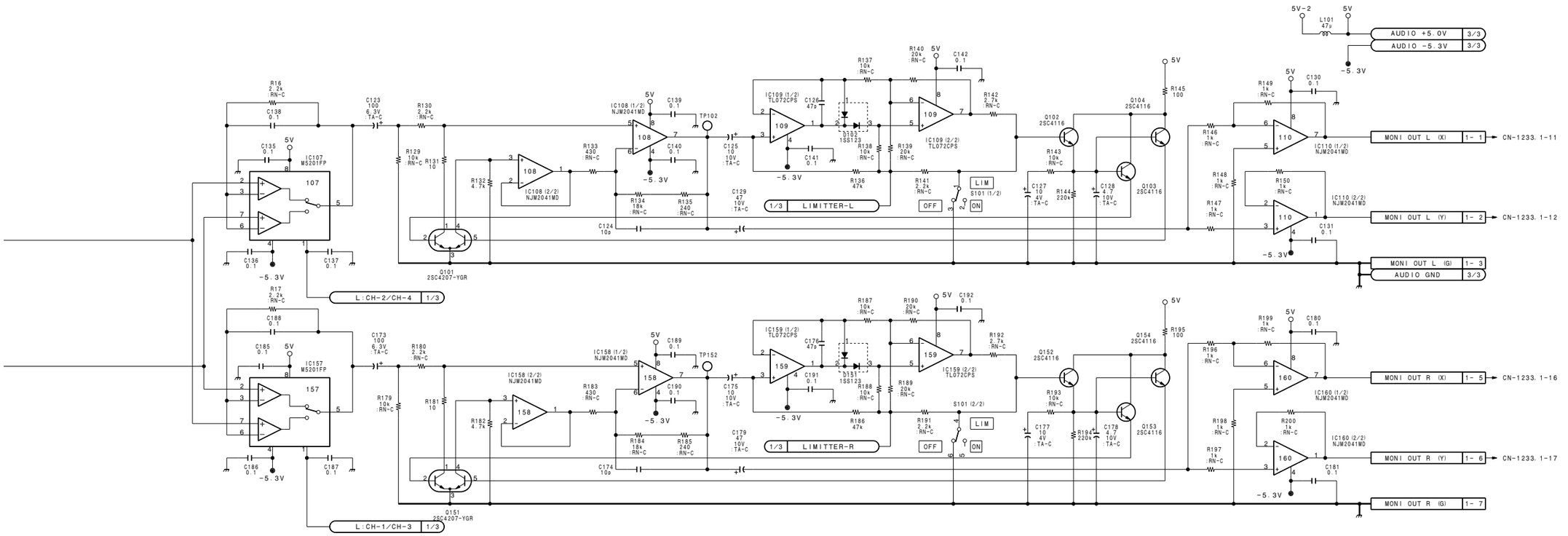


AD-119 (3/3)
BOARD NO. 1-659-727-11
LOT NO. 509-
B-¥CA701-AD119-11

CA-701 (J)
CA-701 (SY)

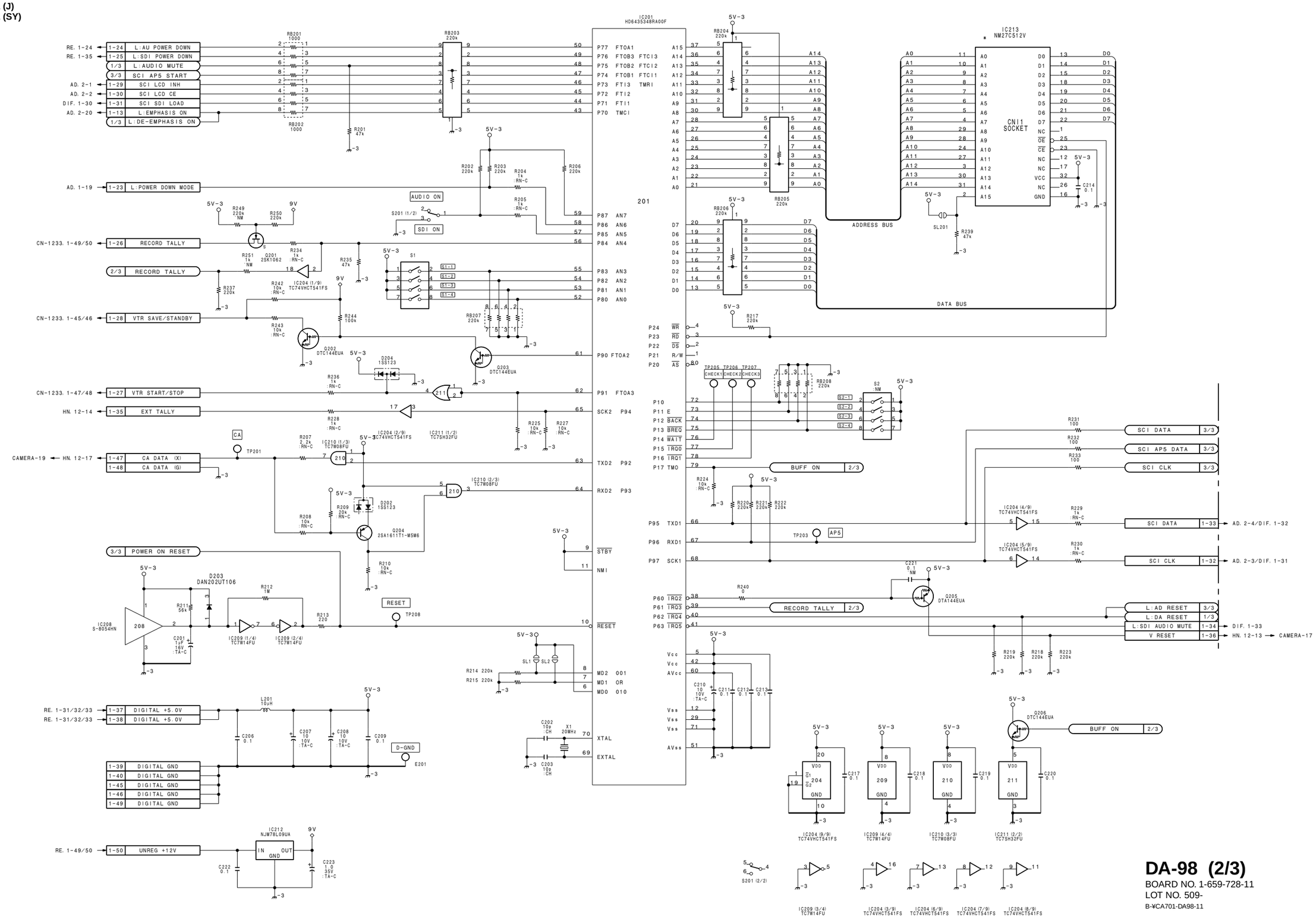


DA-98 (1/3)



DA-98 (1/3)
BOARD NO. 1-659-728-11
LOT NO. 509-
B-¥CA701-DA98-11

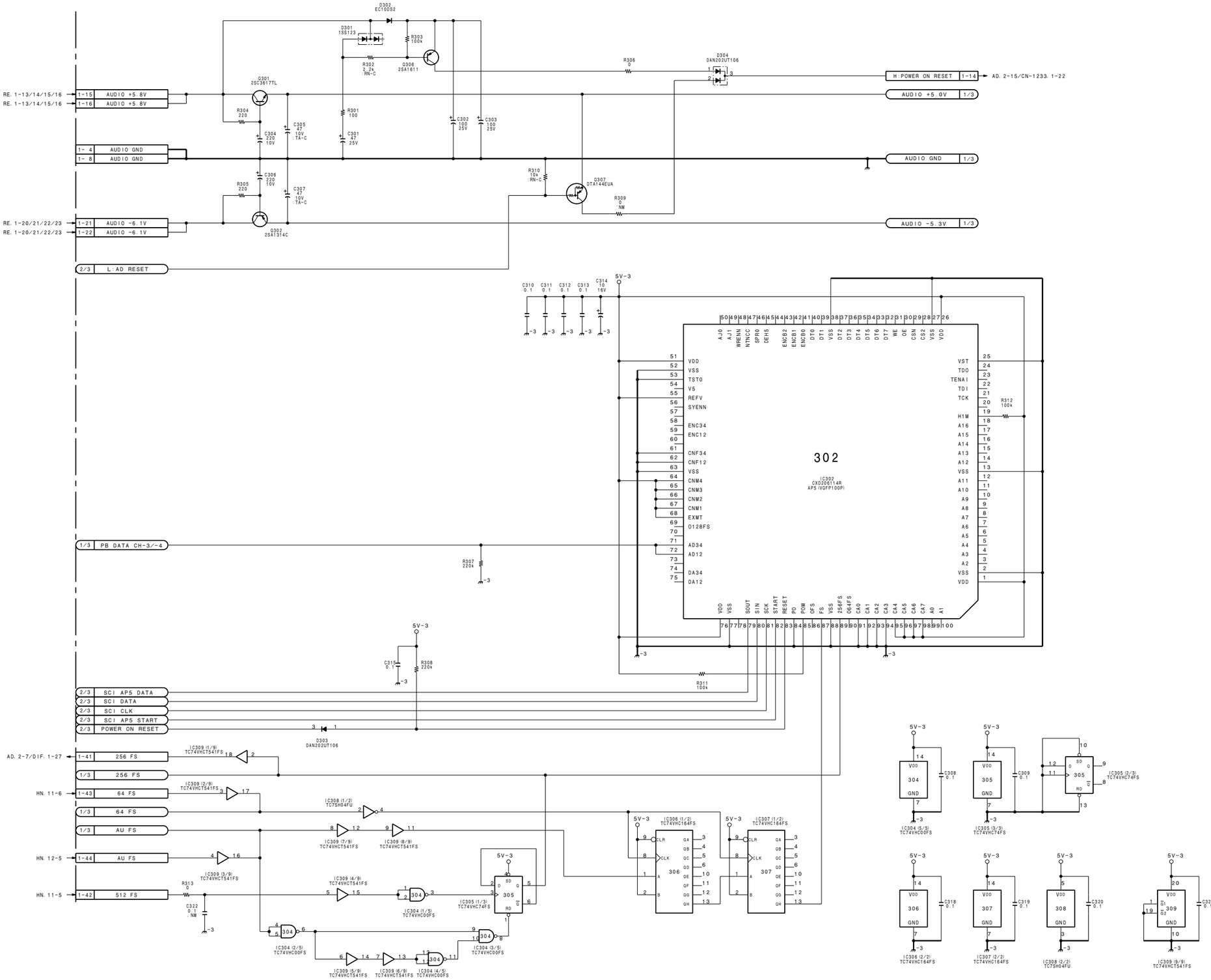
CA-701 (J)
CA-701 (SY)



DA-98 (2/3)

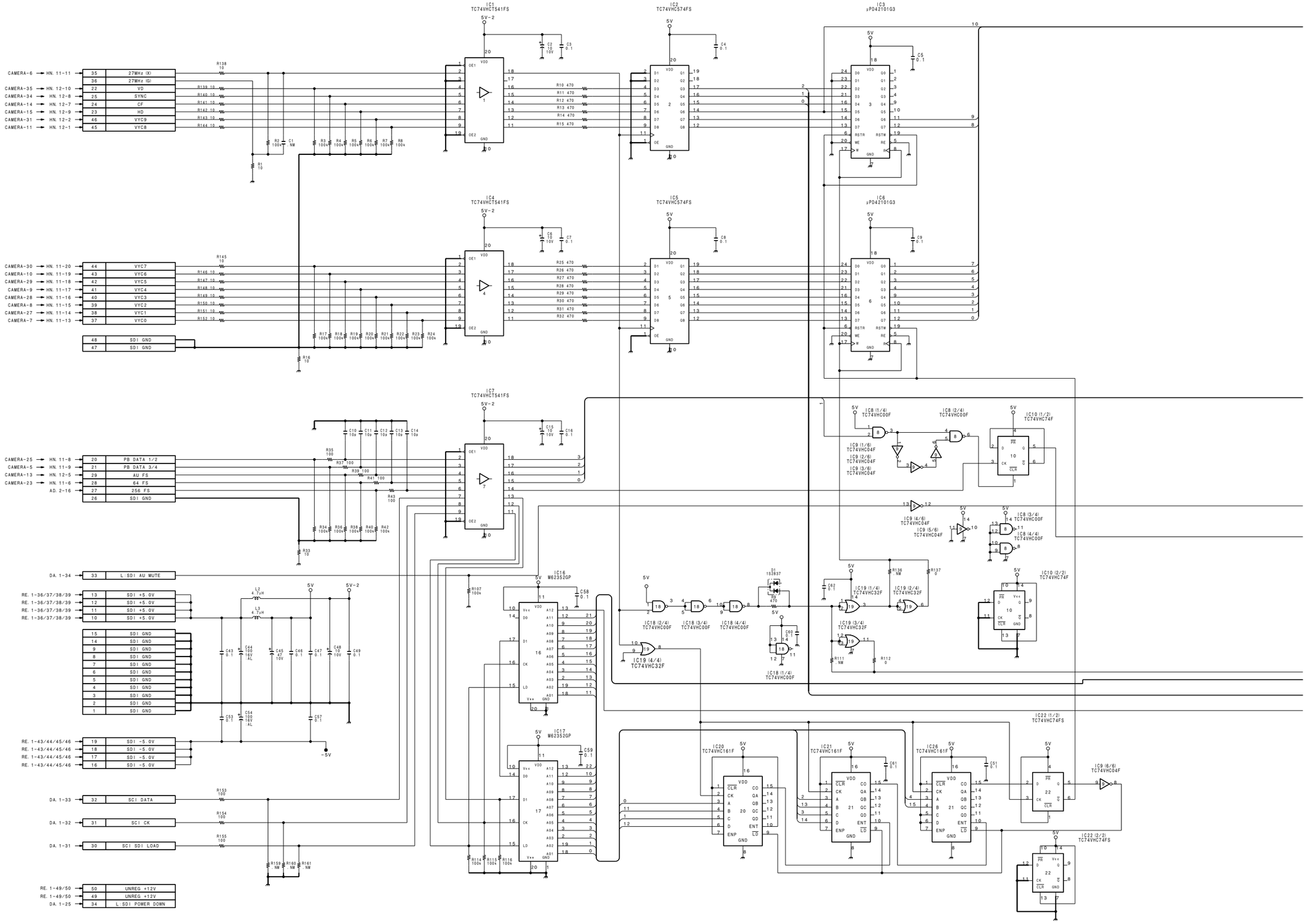
BOARD NO. 1-659-728-11
LOT NO. 509-
B-¥CA701-DA98-11

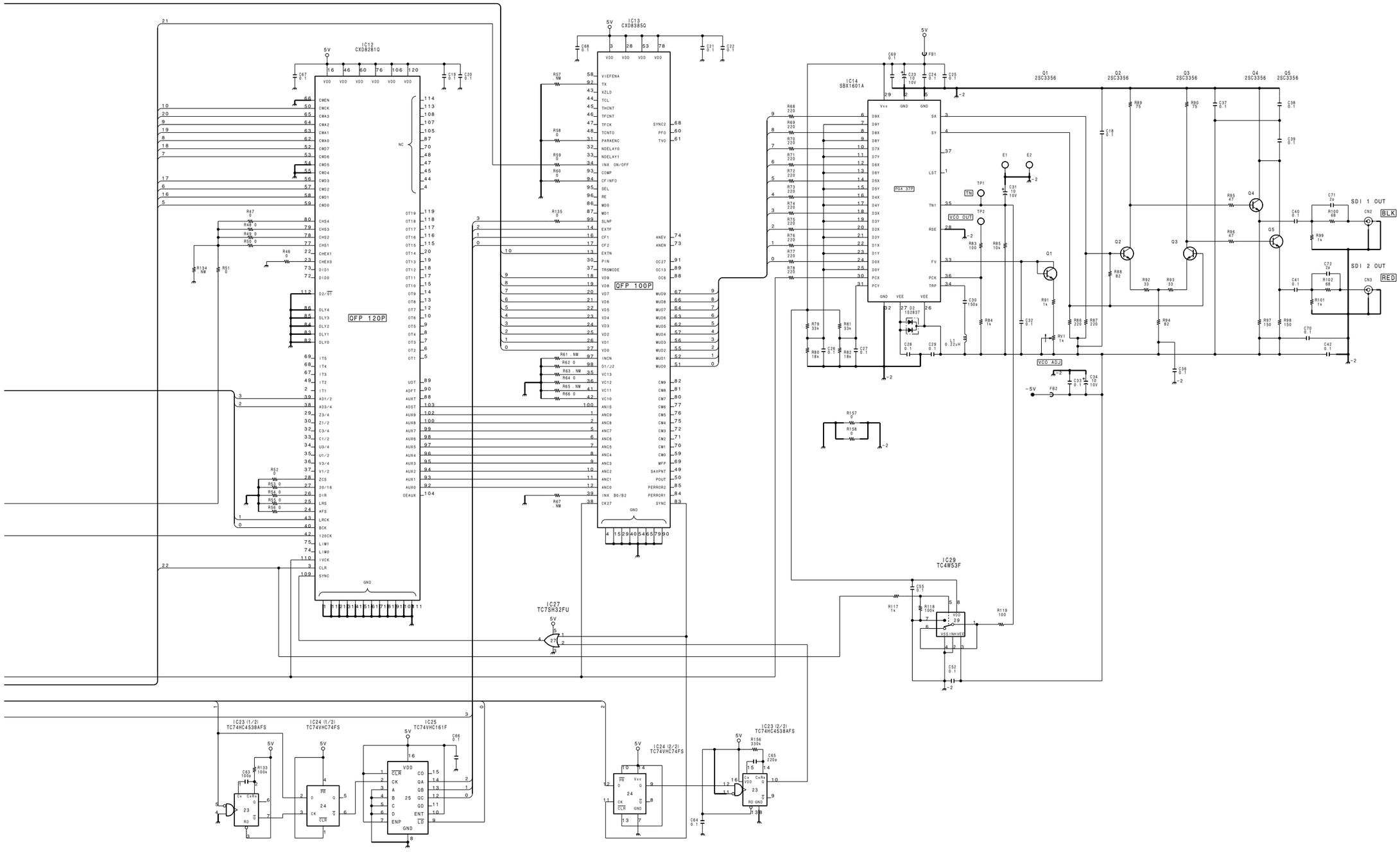
CA-701 (J)
CA-701 (SY)



DA-98 (3/3)
BOARD NO. 1-659-728-11
LOT NO. 509-
B-¥CA701-DA98-11

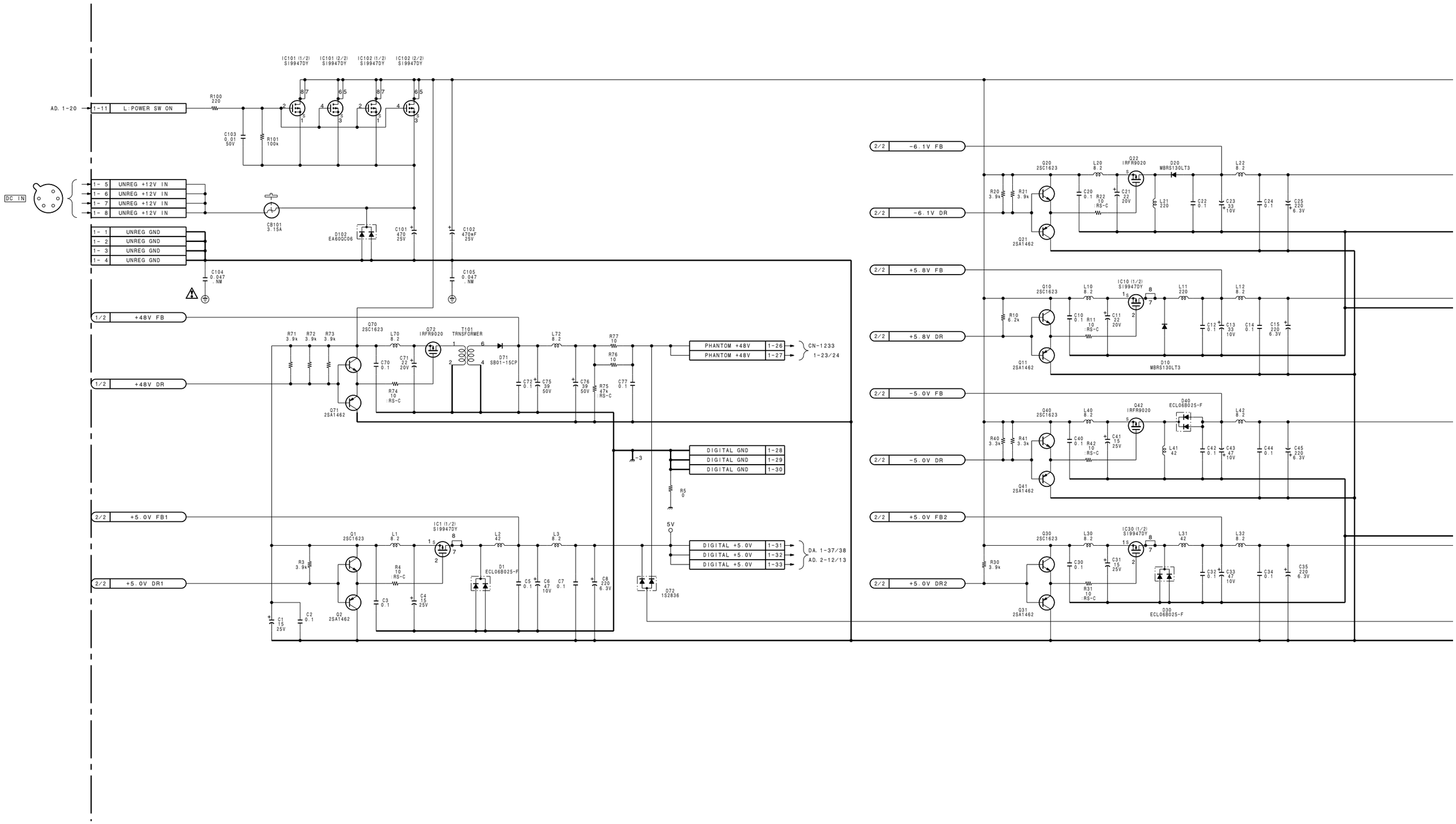
CA-701 (J)
CA-701 (SY)

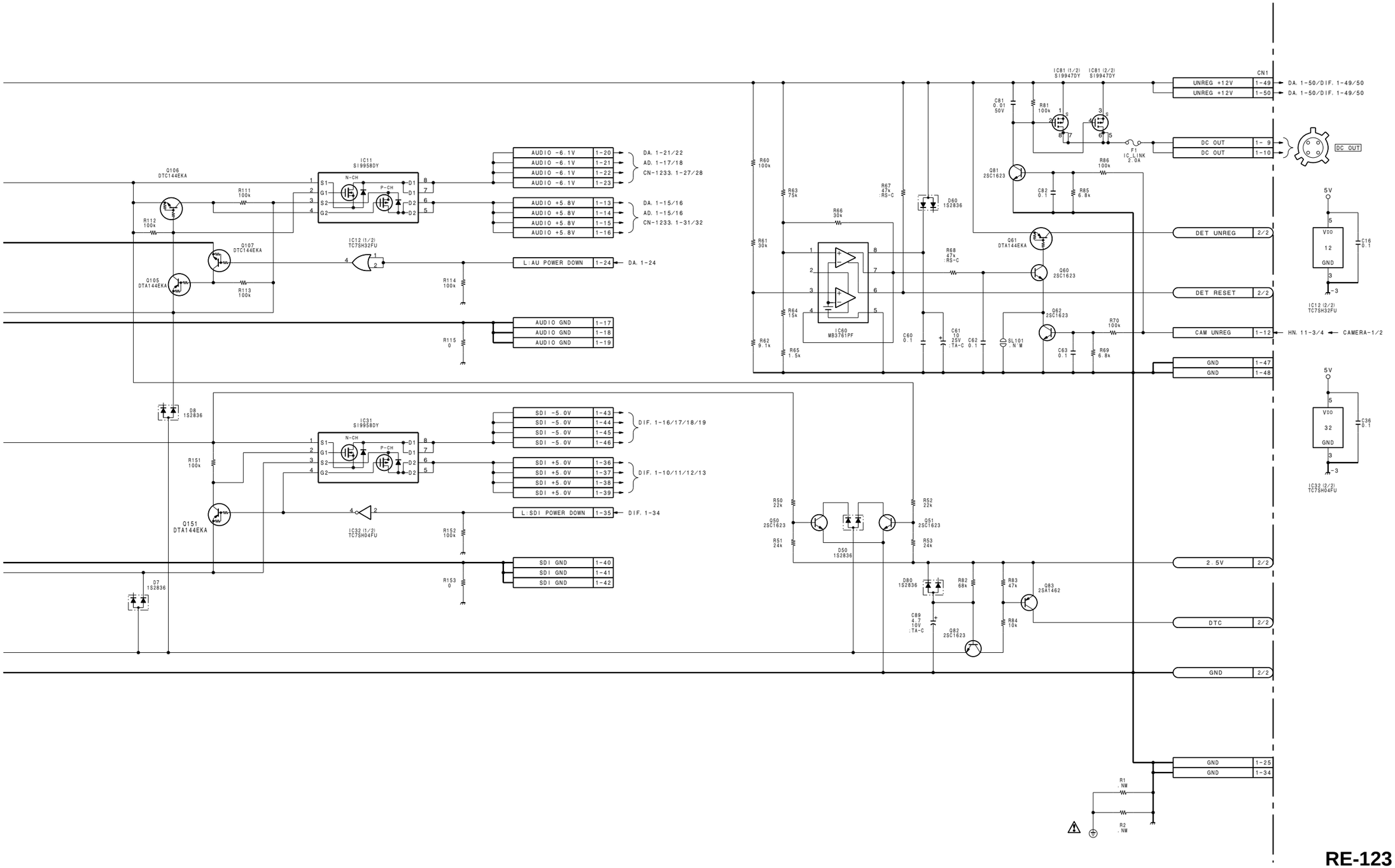




DIF-41
BOARD NO. 1-659-729-11
LOT NO. 509-
B-¥CA701-DIF41-11

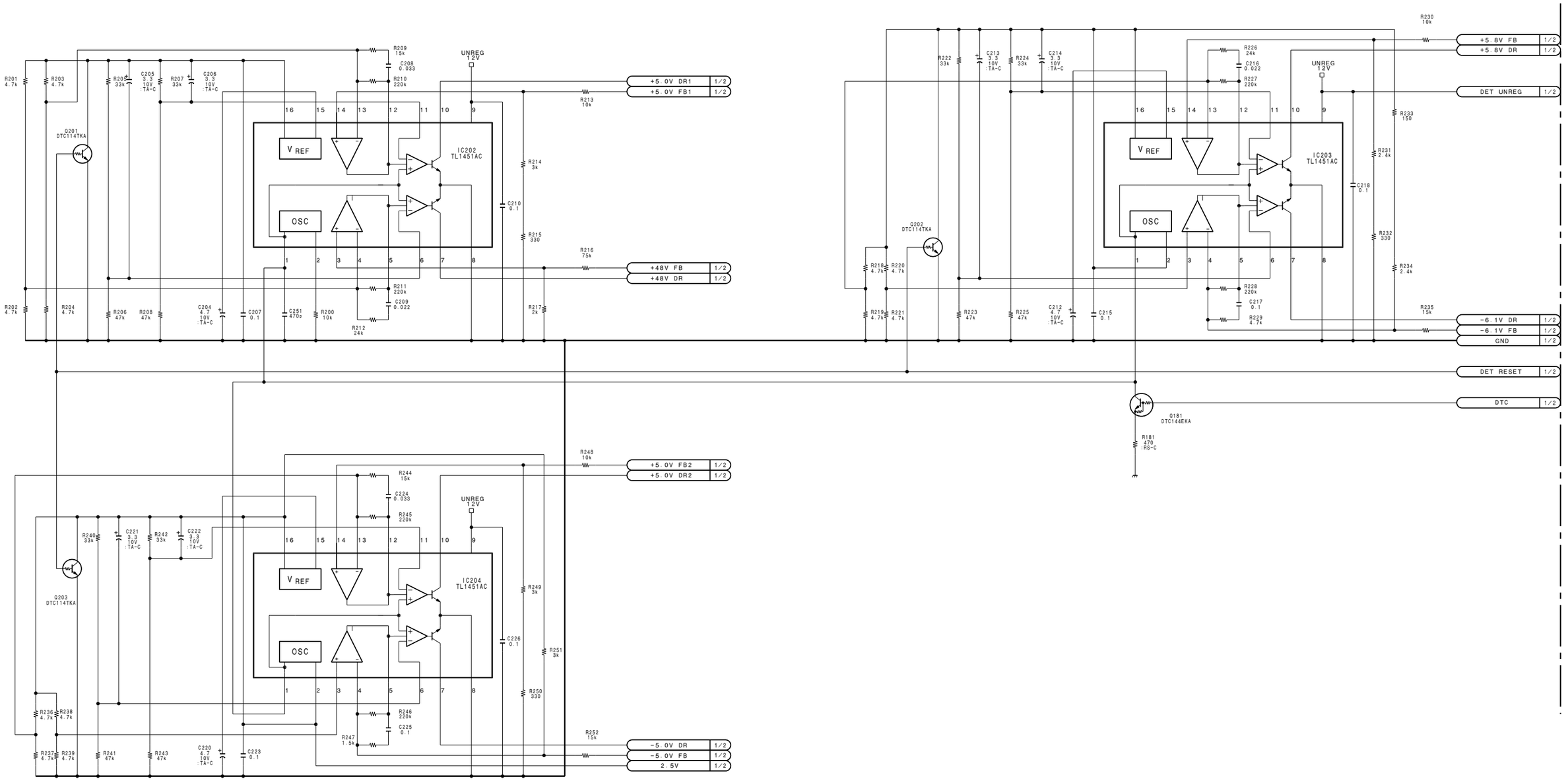
CA-701 (J)
CA-701 (SY)





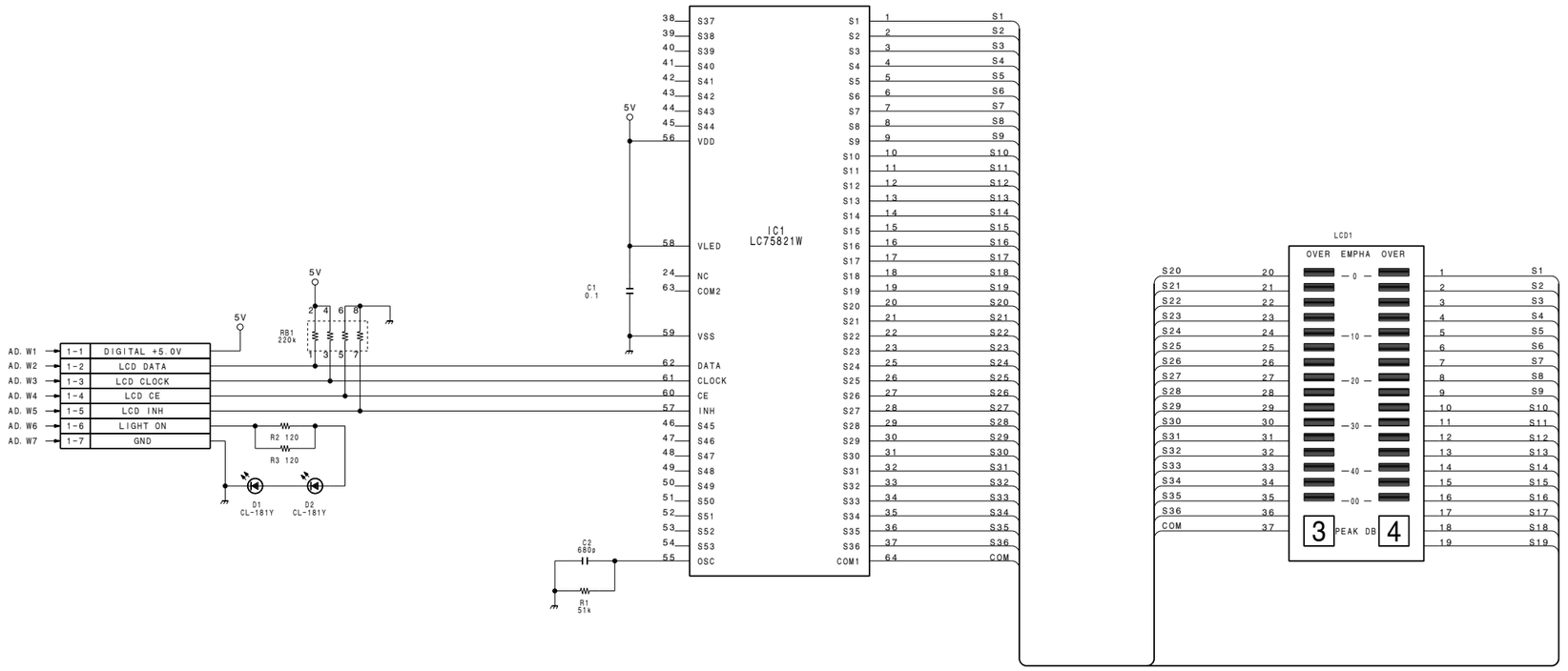
RE-123 (1/2)
BOARD NO. 1-659-730-11
LOT NO. 509-
B-¥CA701-RE123-11

CA-701 (J)
CA-701 (SY)



RE-123 (2/2)
BOARD NO. 1-659-730-11
LOT NO. 509-
B-¥CA701-RE123-11

CA-701 (J)
CA-701 (SY)



DP-234
BOARD NO. 1-659-725-11
LOT NO. 509-
B-¥CA701-DP234-11

CA-701 (J)
CA-701 (SY)

CN101 DA-98

50	UNREG +12V		201-49. 50. 301-49. 50
49	DIGITAL GND		
48	CA DATA (G)		502-18
47	CA DATA (X)		502-17
46	DIGITAL GND		
45	DIGITAL GND		
44	AU FS		502-5. 402-9. 301-29
43	64 FS		501-6. 402-8. 301-28
42	512 FS		501-5
41	256 FS		402-7. 301-27
40	DIGITAL GND		
39	DIGITAL GND		
38	DIGITAL +5.0V		201-31. 32. 33. 402-12. 13
37	DIGITAL +5.0V		
36	V RESET		502-13
35	EXT TALLY		502-14
34	L:SDI AU MUTE		301-33
33	SCI DATA		402-4. 301-32
32	SCI CLK		402-3. 301-31
31	SCI SDI LOAD		301-30
30	SCI LCD CE		402-2
29	SCI LCD INH		402-1
28	VTR SAVE/STANDBY		601-45. 46
27	VTR START/STOP		601-47. 48
26	RECORD TALLY		601-49. 50
25	L:SDI POWER DOWN		301-34. 201-35
24	L:AUDIO POWER DOWN		201-24
23	L:POWER DOWN MODE		401-19
22	AUDIO -6.1V		201-20. 21. 22. 23.
21	AUDIO -6.1V		401-17. 18. 601-27. 28
20	PB DATA CH-1/-2		501-8. 301-20
19	PB DATA CH-3/-4		501-9. 301-21
18	AUDIO GND		
17	AUDIO GND		
16	AUDIO +5.8V		201-13. 14. 15. 16.
15	AUDIO +5.8V		401-15. 16. 601-31. 32
14	H:POWER ON RESET		402-15. 601-22
13	L:EMPHASIS ON		402-20
12	L:AUDIO MUTE		402-14. 601-21
11	H:CH-1_2/L:CH-3_4		401-1
10	L:CH-1/CH-3		401-2
9	L:CH-2/CH-4		401-3
8	AUDIO GND		
7	MONI OUT R (G)		601-18
6	MONI OUT R (Y)		601-17
5	MONI OUT R (X)		601-16
4	AUDIO GND		
3	MONI OUT L (G)		601-13
2	MONI OUT L (Y)		601-12
1	MONI OUT L (X)		601-11

CN201 RE-123

50	UNREG +12V		101-50. 301-49. 50
49	UNREG +12V		
48	GND		
47	GND		
46	SDI -5.0V		301-16. 17. 18. 19
45	SDI -5.0V		
44	SDI -5.0V		
43	SDI -5.0V		
42	SDI GND		
41	SDI GND		
40	SDI GND		
39	SDI +5.0V		301-10. 11. 12. 13
38	SDI +5.0V		
37	SDI +5.0V		
36	SDI +5.0V		
35	L:SDI POWER DOWN		101-25. 301-34
34	DIGITAL GND		
33	DIGITAL +5.0V		101-37. 38. 402-12. 13
32	DIGITAL +5.0V		
31	DIGITAL +5.0V		
30	DIGITAL GND		
29	DIGITAL GND		
28	DIGITAL GND		
27	PHANTOM +48V		601-23. 24
26	PHANTOM +48V		
25	AUDIO GND		
24	L:AUDIO POWER DOWN		101-24
23	AUDIO -6.1V		101-21. 22. 601-27. 28.
22	AUDIO -6.1V		
21	AUDIO -6.1V		401-17. 18
20	AUDIO -6.1V		
19	AUDIO GND		
18	AUDIO GND		
17	AUDIO GND		
16	AUDIO +5.8V		
15	AUDIO +5.8V		101-15. 16. 401-15. 16.
14	AUDIO +5.8V		601-31. 32
13	AUDIO +5.8V		
12	CAM UNREG		
11	L:POWER SW ON		401-20
10	DC OUT		704-1. 2
9	DC OUT		
8	UNSW +12V		
7	UNSW +12V		701-4. 5. 6. 703-1. 2. 3
6	UNSW +12V		
5	UNSW +12V		
4	UNREG GND		
3	UNREG GND		
2	UNREG GND		
1	UNREG GND		

CN301 DIF-41

50	UNREG +12V		101-50. 201-49. 50
49	UNREG +12V		
48	SDI GND		
47	SDI GND		
46	VYC9		502-2
45	VYC8		502-1
44	VYC7		501-20
43	VYC6		501-19
42	VYC5		501-18
41	VYC4		501-17
40	VYC3		501-16
39	VYC2		501-15
38	VYC1		501-14
37	VYC0		501-13
36	27MHZ (G)		501-12
35	27MHZ (X)		501-11
34	L:SDI POWER DOWN		101-25. 201-35
33	L:SDI AU MUTE		101-34
32	SCI DATA		101-33. 402-4
31	SCI CLK		101-32. 402-3
30	SCI SDI LOAD		101-31
29	AU FS		101-44. 502-5. 402-9
28	64 FS		101-43. 501-6. 402-8
27	256 FS		101-41. 402-7
26	SDI GND		
25	SYNC		502-8
24	CF		502-7
23	HD		502-9
22	VD		502-10
21	PB DATA CH-3/-4		101-19. 501-9
20	PB DATA CH-1/-2		101-20. 501-8
19	SDI -5.0V		
18	SDI -5.0V		201-43. 44. 45. 46
17	SDI -5.0V		
16	SDI -5.0V		
15	SDI GND		
14	SDI GND		
13	SDI +5.0V		
12	SDI +5.0V		201-36. 37. 38. 39
11	SDI +5.0V		
10	SDI +5.0V		
9	SDI GND		
8	SDI GND		
7	SDI GND		
6	SDI GND		
5	SDI GND		
4	SDI GND		
3	SDI GND		
2	SDI GND		
1	SDI GND		

CN401 AD-119 ANALOG (1/2)

1	H:CH-1_2/L:CH-3_4		101-11
2	L:CH-1/CH-3		101-10
3	L:CH-2/CH-4		101-9
4	AUDIO GND		
5	AUDIO GND		
6	CH-3 MIC/LINE (X)		601-1
7	CH-3 MIC/LINE (Y)		601-2
8	CH-3 MIC/LINE (G)		601-3
9	AUDIO GND		
10	CH-4 MIC/LINE (X)		601-6
11	CH-4 MIC/LINE (Y)		601-7
12	CH-4 MIC/LINE (G)		601-8
13	AUDIO GND		
14	AUDIO GND		
15	AUDIO +5.8V		101-15. 16. 601-31. 32.
16	AUDIO +5.8V		201-13. 14. 15. 16
17	AUDIO -6.1V		101-21. 22. 601-27. 28.
18	AUDIO -6.1V		201-20. 21. 22. 23
19	L:POWER DOWN MODE		101-23
20	L:POWER SW ON		201-11

CN402 AD-119 DIGITAL (2/2)

1	SCI LCD INH		101-29
2	SCI LCD CE		101-30
3	SCI CLK		101-32. 301-31
4	SCI DATA		101-33. 301-32
5	DIGITAL GND		
6	DIGITAL GND		
7	256 FS		101-41. 301-27
8	64 FS		101-43. 501-6. 301-28
9	AU FS		101-44. 502-5. 301-29
10	DIGITAL GND		
11	DIGITAL GND		
12	DIGITAL +5.0V		101-37. 38. 201-31. 32. 33
13	DIGITAL +5.0V		
14	L:AUDIO MUTE		101-12. 601-21
15	H:POWER ON RESET		101-14. 601-22
16	A/D DATA CH-3/-4		501-7
17	DIGITAL GND		
18	DIGITAL GND		
19	N C		
20	L:EMPHASIS ON		101-13

CN501

HN-225 (1/2)

1	UNREG GND		
2	UNREG GND		
3	CAM UNREG		
4	CAM UNREG		
5	512 FS		101-42
6	64 FS		101-43, 402-8, 301-28
7	A/D DATA CH-3/-4		402-16
8	PB DATA CH-1/-2		101-20, 301-20
9	PB DATA CH-3/-4		101-19, 301-21
10	N C		
11	27MHZ (X)		301-35
12	27MHZ (G)		301-36
13	VYC0		301-37
14	VYC1		301-38
15	VYC2		301-39
16	VYC3		301-40
17	VYC4		301-41
18	VYC5		301-42
19	VYC6		301-43
20	VYC7		301-44

CN502

HN-225 (2/2)

1	VYC8		301-45
2	VYC9		301-46
3	SDI GND		
4	SDI GND		
5	AU FS		101-44, 402-9, 301-29
6	DIGITAL GND		
7	CF		301-24
8	SYNC		301-25
9	HD		301-23
10	VD		301-22
11	RET VIDEO (G)		601-41, 601-42
12	RET VIDEO (X)		601-43, 601-44
13	V RESET		101-36
14	EXT TALLY		101-35
15	N C		
16	DIGITAL GND		
17	CA DATA (X)		101-47
18	CA DATA (G)		101-48
19	N C		
20	N C		

CN601

CN-1233

1	CH-3 MIC/LINE (X)		401-6
2	CH-3 MIC/LINE (Y)		401-7
3	CH-3 MIC/LINE (G)		401-8
4	AUDIO GND		
5	AUDIO GND		
6	CH-4 MIC/LINE (X)		401-10
7	CH-4 MIC/LINE (Y)		401-11
8	CH-4 MIC/LINE (G)		401-12
9	AUDIO GND		
10	AUDIO GND		
11	MONI OUT L (X)		101-1
12	MONI OUT L (Y)		101-2
13	MONI OUT L (G)		101-3
14	AUDIO GND		
15	AUDIO GND		
16	MONI OUT R (X)		101-5
17	MONI OUT R (Y)		101-6
18	MONI OUT R (G)		101-7
19	AUDIO GND		
20	AUDIO GND		
21	L:AUDIO MUTE		101-12, 402-14
22	H:POWER ON RESET		101-14, 402-15
23	PHANTOM +48V		201-26, 27
24	PHANTOM +48V		
25	AUDIO GND		
26	AUDIO GND		
27	AUDIO -6.1V		101-21, 22, 401-17, 18,
28	AUDIO -6.1V		201-20, 21, 22, 23
29	AUDIO GND		
30	AUDIO GND		
31	AUDIO +5.8V		101-15, 16, 401-15, 16,
32	AUDIO +5.8V		201-13, 14, 15, 16
33	AUDIO GND		
34	AUDIO GND		
35	AUDIO GND		
36	AUDIO GND		
37	AUDIO GND		
38	AUDIO GND		
39	AUDIO GND		
40	N C		
41	RET VIDEO (G)		502-11
42	RET VIDEO (G)		502-11
43	RET VIDEO (X)		502-12
44	RET VIDEO (X)		502-12
45	VTR SAVE/STANDBY		101-28
46	VTR SAVE/STANDBY		101-28
47	VTR START/STOP		101-27
48	VTR START/STOP		101-27
49	RECORD TALLY		101-26
50	RECORD TALLY		101-26

CN701

EXDC IN

C1 0.001

1	BATT IN (+)		
2	BATT IN (+)		702-1, 2, 3
3	BATT IN (+)		
4	UNSW +12V		
5	UNSW +12V		703-1, 2, 3, 201-5, 6, 7, 8
6	UNSW +12V		
7	UNREG GND		
8	UNREG GND		
9	UNREG GND		

CN702

BATTERY IN

C2 0.001

1	BATT IN (+)		
2	BATT IN (+)		701-1, 2, 3
3	BATT IN (+)		
4	UNREG GND		
5	UNREG GND		
6	UNREG GND		
7	BATT REM		703-7
8	LIGHT CONT		703-9

CN703

DVW-700

C3 0.001

1	UNSW +12V		
2	UNSW +12V		701-4, 5, 6, 201-5, 6, 7, 8
3	UNSW +12V		
4	UNREG GND		
5	UNREG GND		
6	UNREG GND		
7	BATT REM		702-7
8	UNREG GND		
9	LIGHT CONT		702-8

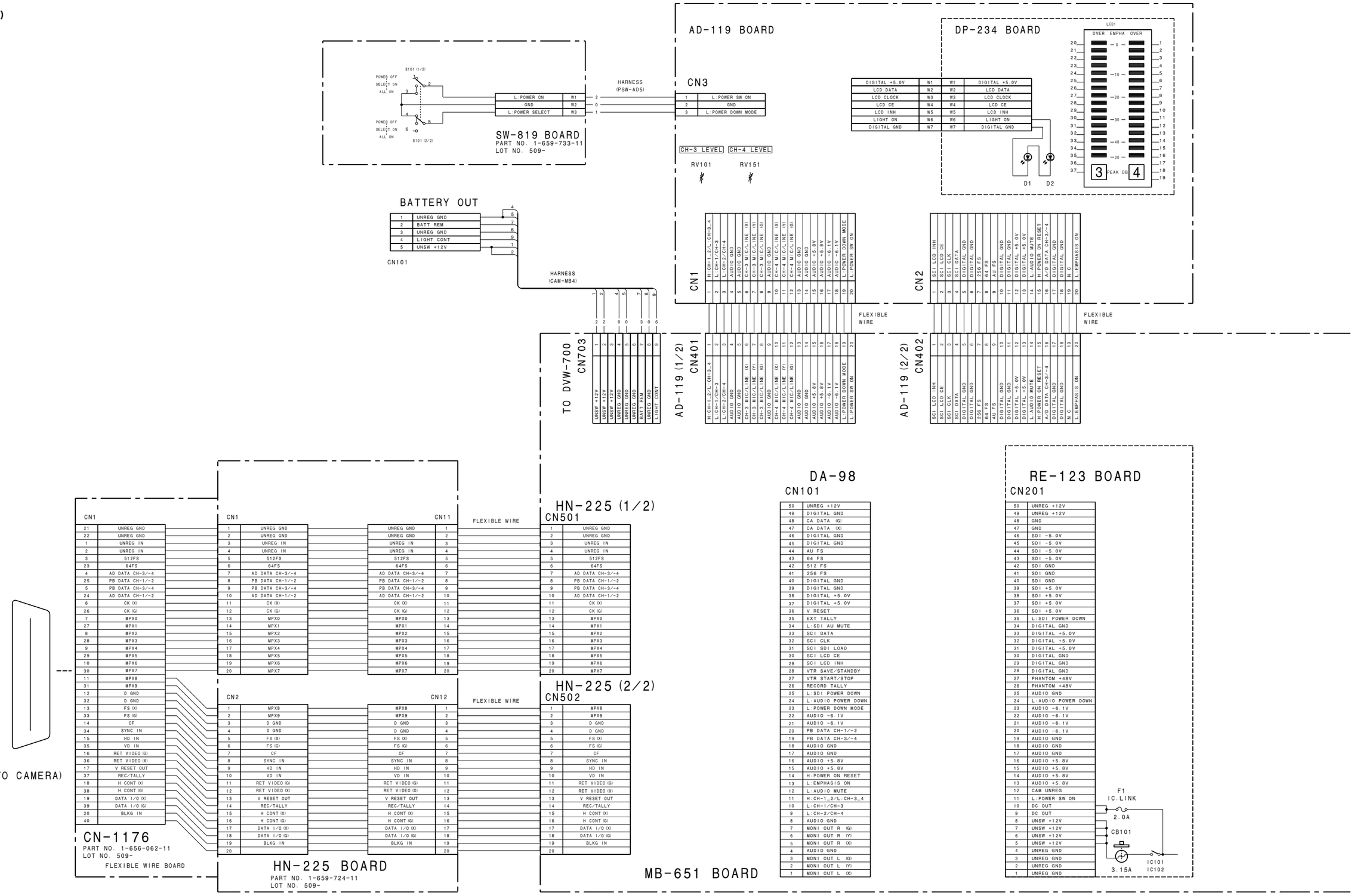
CN704

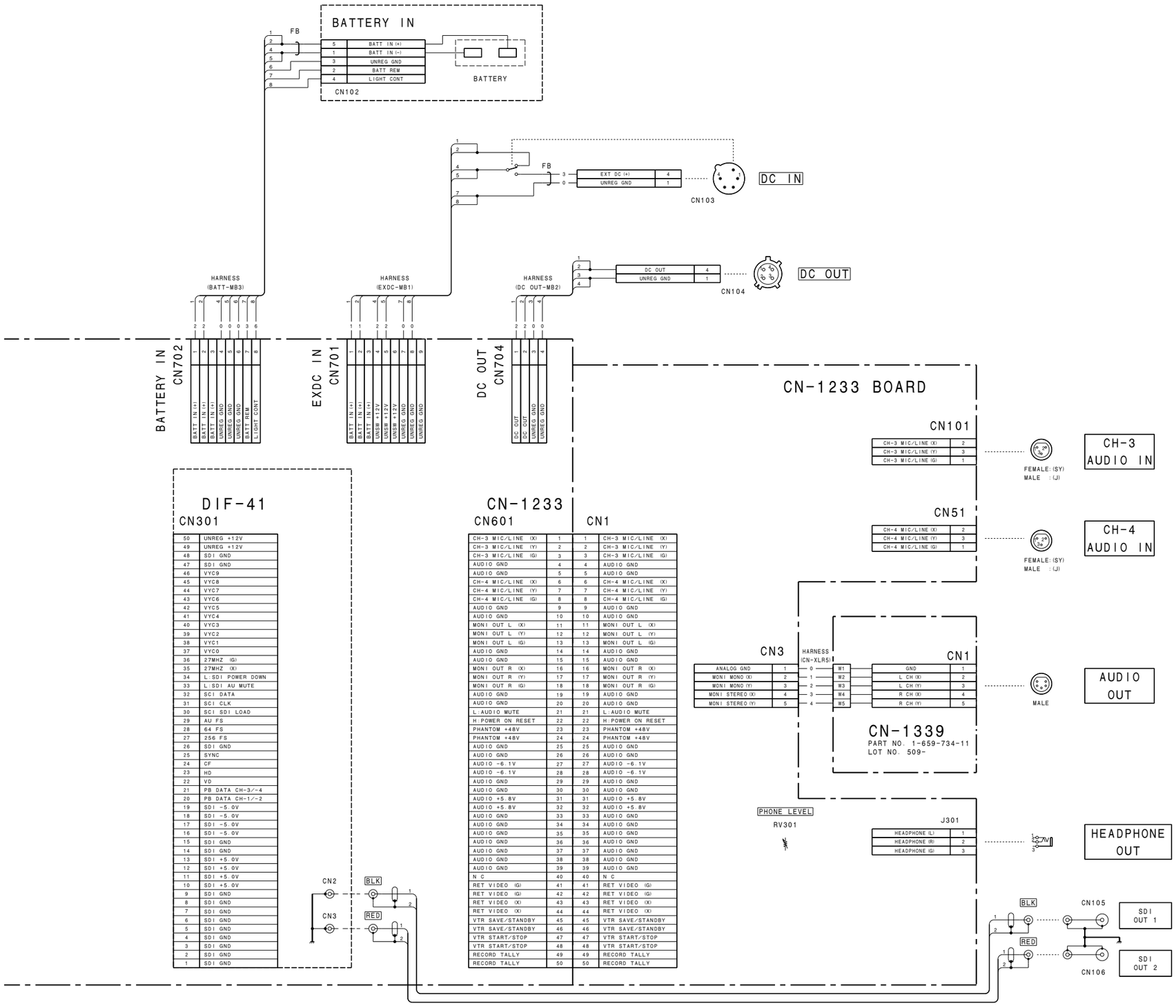
DC OUT

1	DC OUT		201-9, 10
2	DC OUT		
3	UNREG GND		
4	UNREG GND		

MB-651
BOARD NO. 1-659-731-11
LOT NO. 509-
B-¥CA701-MB651-11

CA-701 (J)
CA-701 (SY)





50	UNREG +12V
49	UNREG +12V
48	SDI GND
47	SDI GND
46	VYC9
45	VYC8
44	VYC7
43	VYC6
42	VYC5
41	VYC4
40	VYC3
39	VYC2
38	VYC1
37	VYC0
36	27MHZ (G)
35	27MHZ (X)
34	L:SDI POWER DOWN
33	L:SDI AU MUTE
32	SCI DATA
31	SCI CLK
30	SCI SDI LOAD
29	AU FS
28	64 FS
27	256 FS
26	SDI GND
25	SYNC
24	CF
23	HD
22	VD
21	PB DATA CH-3/-4
20	PB DATA CH-1/-2
19	SDI -5.0V
18	SDI -5.0V
17	SDI -5.0V
16	SDI -5.0V
15	SDI GND
14	SDI GND
13	SDI +5.0V
12	SDI +5.0V
11	SDI +5.0V
10	SDI +5.0V
9	SDI GND
8	SDI GND
7	SDI GND
6	SDI GND
5	SDI GND
4	SDI GND
3	SDI GND
2	SDI GND
1	SDI GND

CH-3 MIC/LINE (X)	1	1	CH-3 MIC/LINE (X)
CH-3 MIC/LINE (Y)	2	2	CH-3 MIC/LINE (Y)
CH-3 MIC/LINE (G)	3	3	CH-3 MIC/LINE (G)
AUDIO GND	4	4	AUDIO GND
AUDIO GND	5	5	AUDIO GND
CH-4 MIC/LINE (X)	6	6	CH-4 MIC/LINE (X)
CH-4 MIC/LINE (Y)	7	7	CH-4 MIC/LINE (Y)
CH-4 MIC/LINE (G)	8	8	CH-4 MIC/LINE (G)
AUDIO GND	9	9	AUDIO GND
AUDIO GND	10	10	AUDIO GND
MONI OUT L (X)	11	11	MONI OUT L (X)
MONI OUT L (Y)	12	12	MONI OUT L (Y)
MONI OUT L (G)	13	13	MONI OUT L (G)
AUDIO GND	14	14	AUDIO GND
AUDIO GND	15	15	AUDIO GND
MONI OUT R (X)	16	16	MONI OUT R (X)
MONI OUT R (Y)	17	17	MONI OUT R (Y)
MONI OUT R (G)	18	18	MONI OUT R (G)
AUDIO GND	19	19	AUDIO GND
AUDIO GND	20	20	AUDIO GND
L:AUDIO MUTE	21	21	L:AUDIO MUTE
H:POWER ON RESET	22	22	H:POWER ON RESET
PHANTOM +48V	23	23	PHANTOM +48V
PHANTOM +48V	24	24	PHANTOM +48V
AUDIO GND	25	25	AUDIO GND
AUDIO GND	26	26	AUDIO GND
AUDIO -6.1V	27	27	AUDIO -6.1V
AUDIO -6.1V	28	28	AUDIO -6.1V
AUDIO GND	29	29	AUDIO GND
AUDIO GND	30	30	AUDIO GND
AUDIO +5.8V	31	31	AUDIO +5.8V
AUDIO +5.8V	32	32	AUDIO +5.8V
AUDIO GND	33	33	AUDIO GND
AUDIO GND	34	34	AUDIO GND
AUDIO GND	35	35	AUDIO GND
AUDIO GND	36	36	AUDIO GND
AUDIO GND	37	37	AUDIO GND
AUDIO GND	38	38	AUDIO GND
AUDIO GND	39	39	AUDIO GND
N C	40	40	N C
RET VIDEO (G)	41	41	RET VIDEO (G)
RET VIDEO (G)	42	42	RET VIDEO (G)
RET VIDEO (X)	43	43	RET VIDEO (X)
RET VIDEO (X)	44	44	RET VIDEO (X)
VTR SAVE/STANDBY	45	45	VTR SAVE/STANDBY
VTR SAVE/STANDBY	46	46	VTR SAVE/STANDBY
VTR START/STOP	47	47	VTR START/STOP
VTR START/STOP	48	48	VTR START/STOP
RECORD TALLY	49	49	RECORD TALLY
RECORD TALLY	50	50	RECORD TALLY

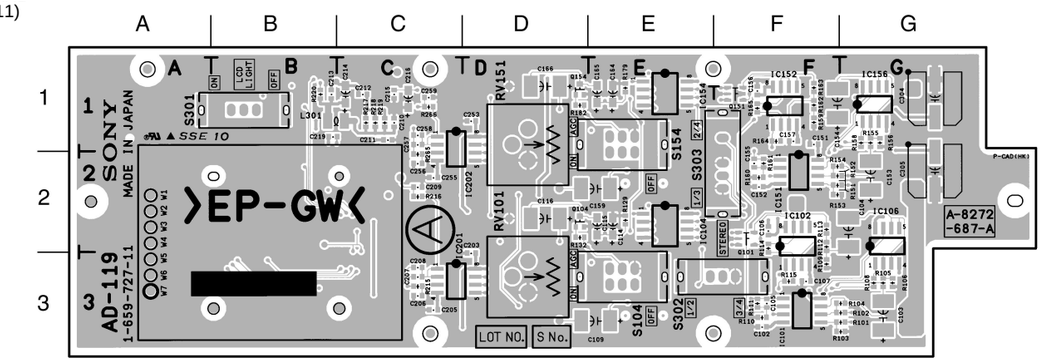
FRAME WIRING
LOT NO. 509-
B-¥CA701-FRAME

Section 7
Board Layouts

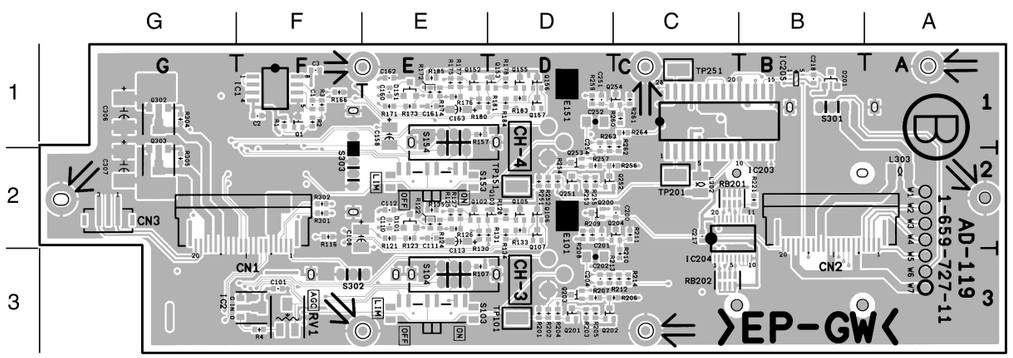
AD-119 BOARD
(1-659-727-11)

CN1	*	F2
CN2	*	B2
CN3	*	G2
D101	*	E2
D151	*	E1
D201	*	B1
E101	*	D2
IC1	*	F1
IC2	*	F3
IC101		F3
IC102		F2
IC104		E2
IC106		G2
IC151		F2
IC152		F1
IC154		E1
IC156		G1
IC201		C3
IC202		C1
IC203	*	C1
IC204	*	C2
IC205	*	B1
L301		B1
L302	*	C2
L303	*	A2
Q1	*	F1
Q101		F2
Q102	*	E2
Q103	*	D2
Q104		D2
Q105	*	D2
Q106	*	D2
Q107	*	D2
Q151		F1
Q152	*	E1
Q153	*	D1
Q154		D1
Q155	*	D1
Q156	*	D1
Q157	*	D1
Q200	*	D2
Q201	*	D3
Q202	*	D3
Q203	*	D3
Q204	*	C2
Q251	*	D2
Q252	*	D2
Q253	*	D2
Q254	*	C1
Q302	*	G1
Q303	*	G2
RB201	*	C2
RB202	*	C3
RV1	*	F3
RV101		D3
RV151		D1
S103	*	E3
S104		E3
S153	*	E2
S154		E1
S301		B1
S302		F3
S303		F2
TP101	*	D3
TP151	*	D2

* : B Side



AD-119 - A SIDE -
1-659-727-11

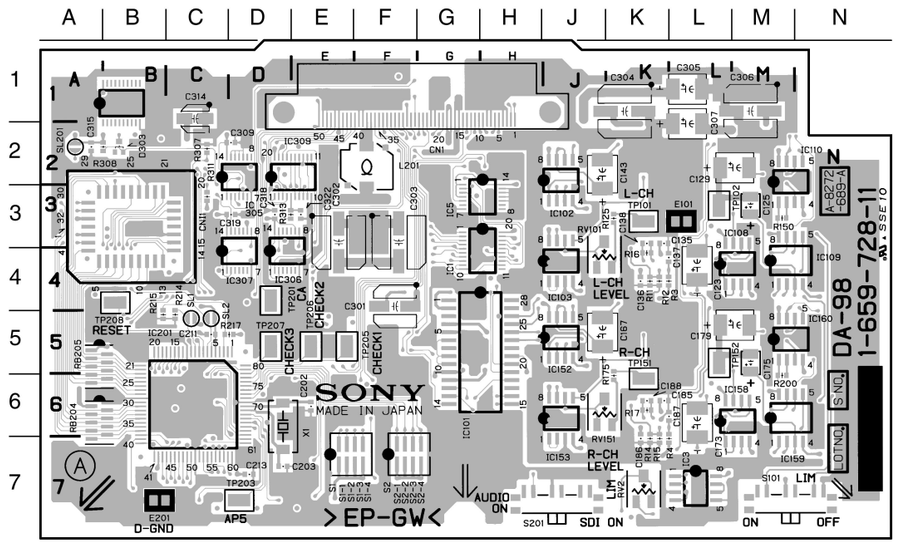


AD-119 - B SIDE -
1-659-727-11

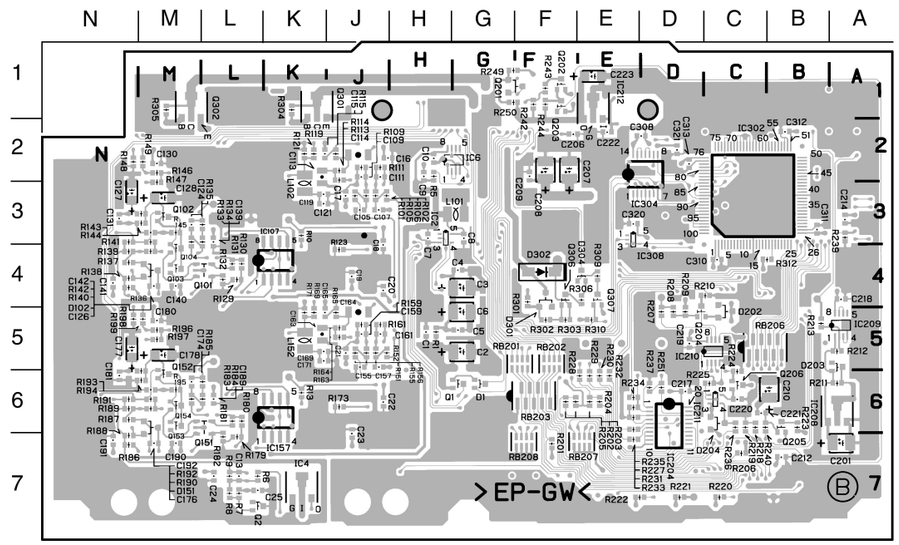
DA-98 BOARD
(1-659-728-11)

CNI1		B3
CN1		F1
D1	*	G6
D102	*	M4
D151	*	M6
D202	*	C5
D203	*	A5
D204	*	C6
D301	*	F4
D302	*	F4
D303		B2
D304	*	E4
E101		L3
E201		B7
IC1		G3
IC2	*	H3
IC3		L7
IC4	*	K7
IC5		G3
IC6	*	G2
IC101		G4
IC102		J3
IC103		J4
IC107	*	K4
IC108		L4
IC109		M4
IC110		M3
IC152		J5
IC153		J7
IC157	*	K7
IC158		L7
IC159		M7
IC160		M5
IC201		C6
IC204	*	D6
IC208	*	A6
IC209	*	A5
IC210	*	C5
IC211	*	C6
IC212	*	E1
IC213		B3
IC302	*	C3
IC304	*	E3
IC305		C3
IC306		D4
IC307		C4
IC308	*	E3
IC309		D3
L101	*	G3
L102	*	K3
L152	*	K5
L201		F2
Q1	*	G6
Q2	*	L7
Q101	*	L4
Q102	*	M3
Q103	*	M4
Q104	*	M4
Q151	*	L6
Q152	*	M6
Q153	*	M6
Q154	*	M6
Q201	*	F1
Q202	*	F1
Q203	*	F1
Q204	*	D5
Q205	*	B6
Q206	*	C6
Q301	*	K1
Q302	*	M1
Q306	*	F4
Q307	*	E4
RB201	*	F5
RB202	*	F5
RB203	*	F6
RB204		A6
RB205		A5
RB206	*	C5
RB207	*	E7
RB208	*	F7
RV2		K7
RV101		J4
RV151		J6
S1		E7
S101		M7
S201		J7
TP101		K3
TP102		L3
TP151		K6
TP152		L5
TP201		D4
TP203		D7
TP205		E5
TP206		E5
TP207		D5
TP208		B4
X1		D6

* : B Side



DA-98 - A SIDE -
1-659-728-11

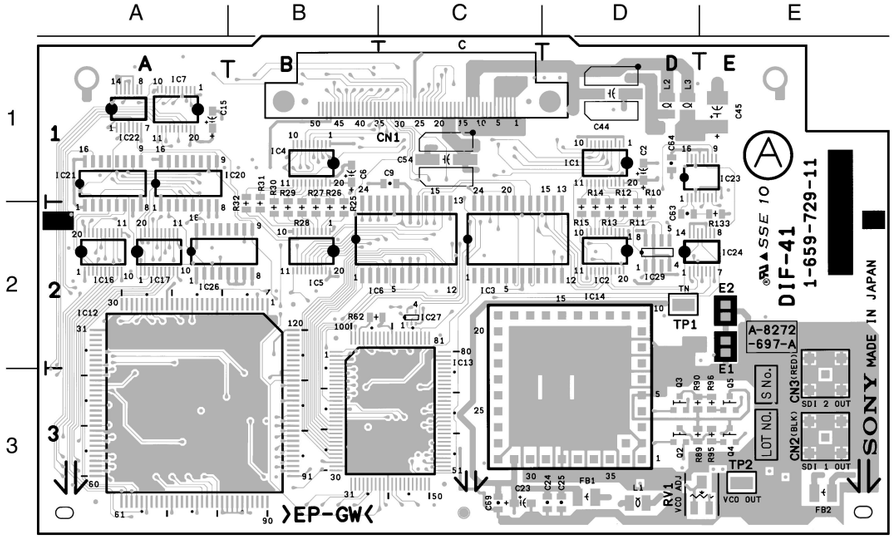


DA-98 - B SIDE -
1-659-728-11

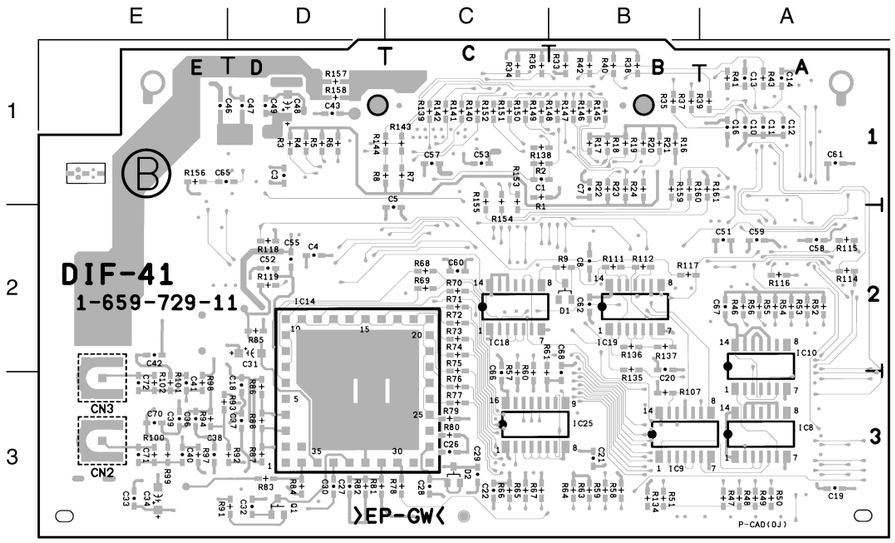
DIF-41 BOARD
(1-659-729-11)

CN1		B1
CN2		D3
CN3		D3
D1	*	B2
D2	*	B3
E1		D2
E2		D2
FB1		C3
FB2		D3
IC1		C1
IC2		C2
IC3		B2
IC4		B1
IC5		B2
IC6		B2
IC7		A1
IC8	*	A3
IC9	*	B3
IC10	*	A2
IC12		A3
IC13		B3
IC14		C3
IC16		A2
IC17		A2
IC18	*	B2
IC19	*	B2
IC20		A1
IC21		A1
IC22		A1
IC23		D1
IC24		D2
IC25	*	B3
IC26		A2
IC27		B2
IC29		C2
L1		C3
L2		C1
L3		C1
Q1	*	C3
Q2		C3
Q3		C3
Q4		D3
Q5		D3
RV1		D3
TP1		C2
TP2		D3

* : B Side



DIF-41 - A SIDE -
1-659-729-11

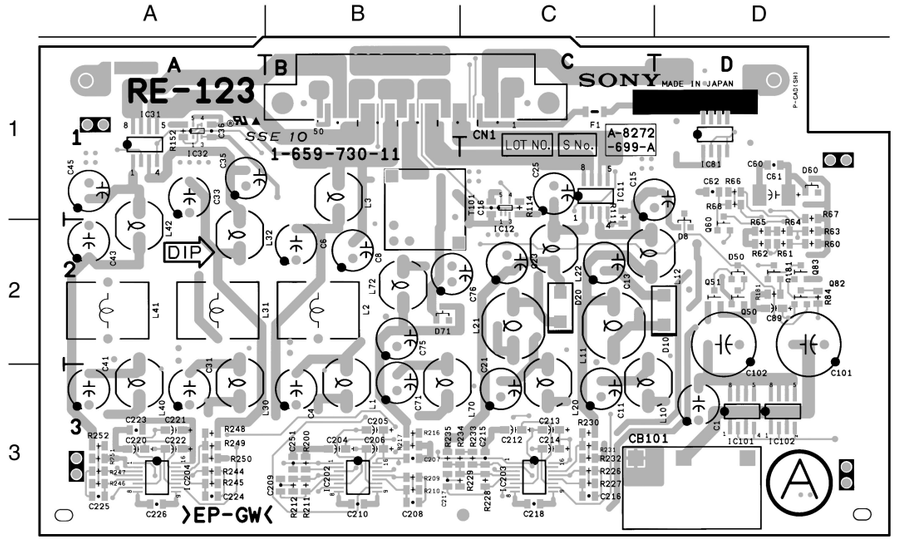


DIF-41 - B SIDE -
1-659-729-11

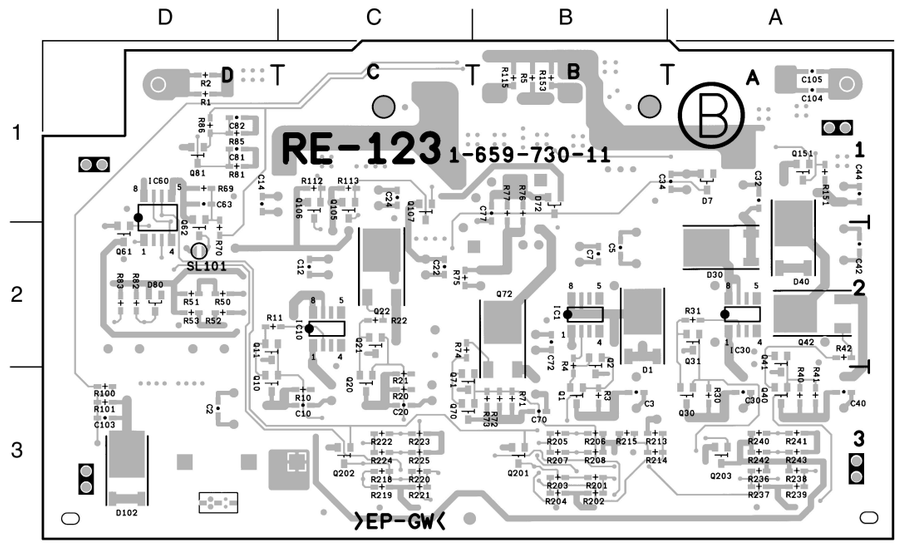
RE-123 BOARD
(1-659-730-11)

CB101		D3
CN1		B1
D1	*	B2
D7	*	A1
D8		D2
D10		D2
D20		C2
D30	*	A2
D40	*	A2
D50		D2
D60		D1
D71		B2
D72	*	B1
D80	*	D2
D102	*	D3
F1		C1
IC1	*	B2
IC10	*	C2
IC11		C1
IC12		C1
IC30	*	A2
IC31		A1
IC32		A1
IC60	*	D1
IC81		D1
IC101		D3
IC102		D3
IC202		B3
IC203		C3
IC204		A3
L1		B3
L2		B2
L3		B1
L10		C3
L11		C2
L12		C2
L20		C3
L21		C2
L22		C2
L30		A3
L31		A2
L32		A2
L40		A3
L41		A2
L42		A2
L70		B3
L72		B2
Q1	*	B3
Q2	*	B2
Q10	*	D3
Q11	*	D2
Q20	*	C3
Q21	*	C2
Q22	*	C2
Q30	*	A3
Q31	*	A2
Q40	*	A3
Q41	*	A2
Q42	*	A2
Q50		D2
Q51		D2
Q60		D2
Q61	*	D2
Q62	*	D2
Q70	*	C3
Q71	*	C3
Q72	*	B2
Q81	*	D1
Q82		D2
Q83		D2
Q105	*	C1
Q106	*	C1
Q107	*	C1
Q151	*	A1
Q181		D2
Q201	*	B3
Q202	*	C3
Q203	*	A3
T101		B1

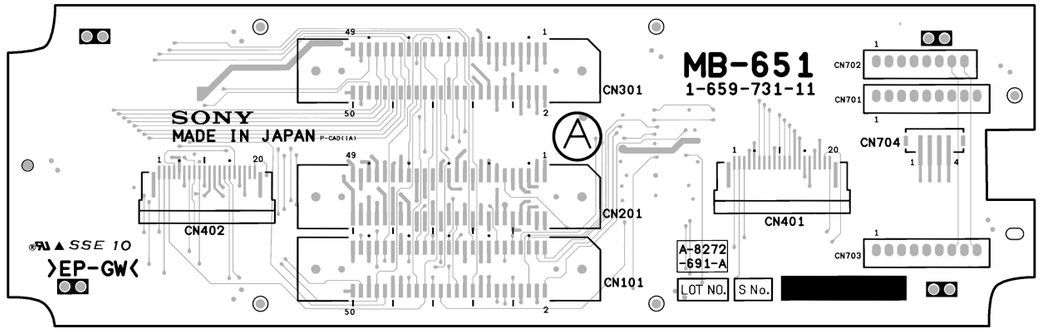
* : B Side



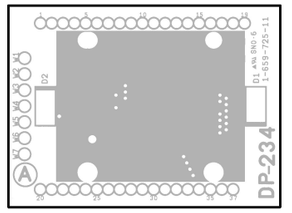
RE-123 - A SIDE -
1-659-730-11



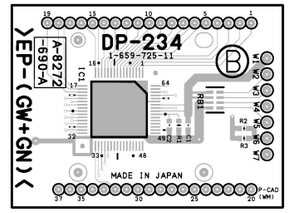
RE-123 - B SIDE -
1-659-730-11



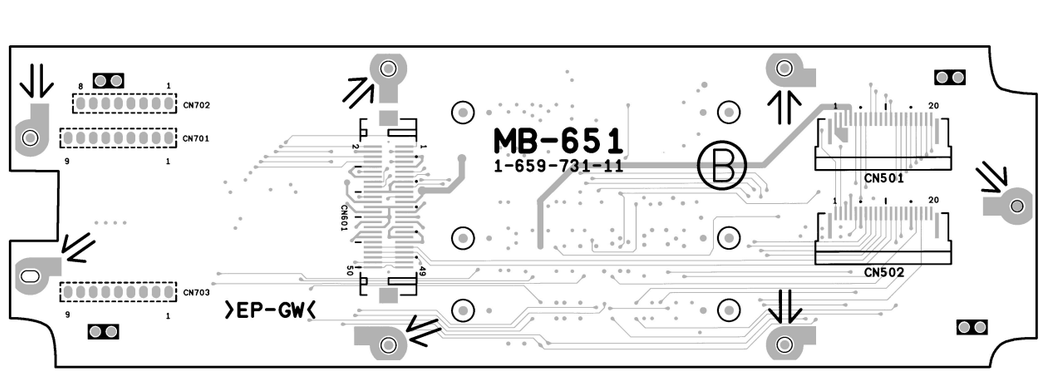
MB-651 - A SIDE -
1-659-731-11



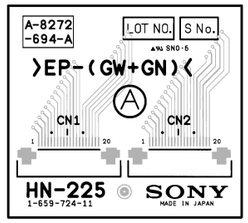
DP-234 - A SIDE -
1-659-725-11



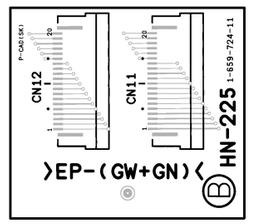
DP-234 - B SIDE -
1-659-725-11



MB-651 - B SIDE -
1-659-731-11



HN-225 - A SIDE -
1-659-724-11

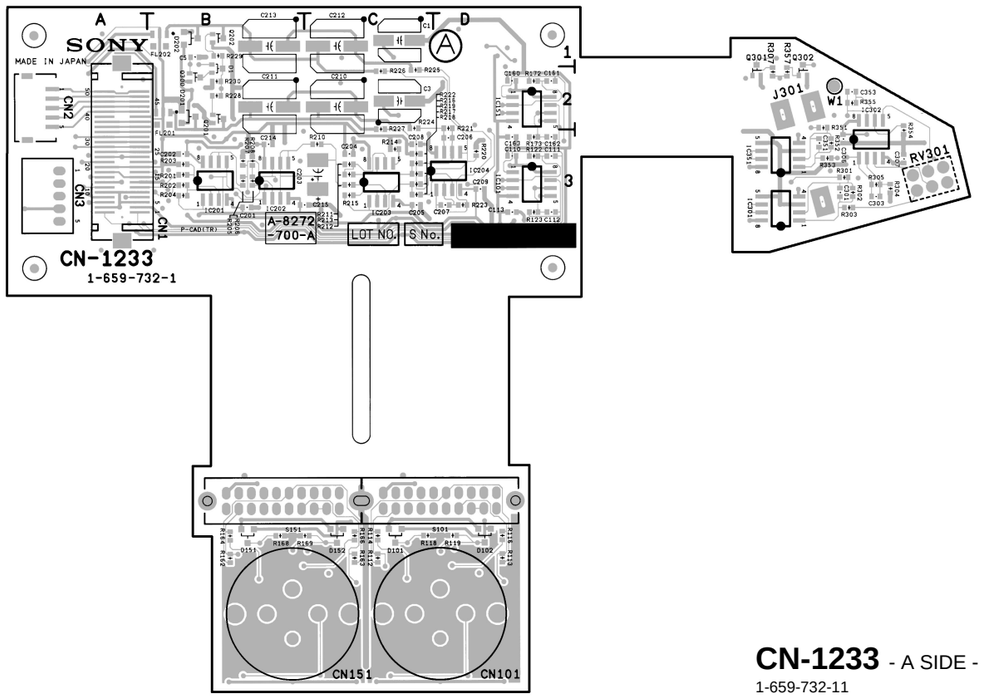


HN-225 - B SIDE -
1-659-724-11

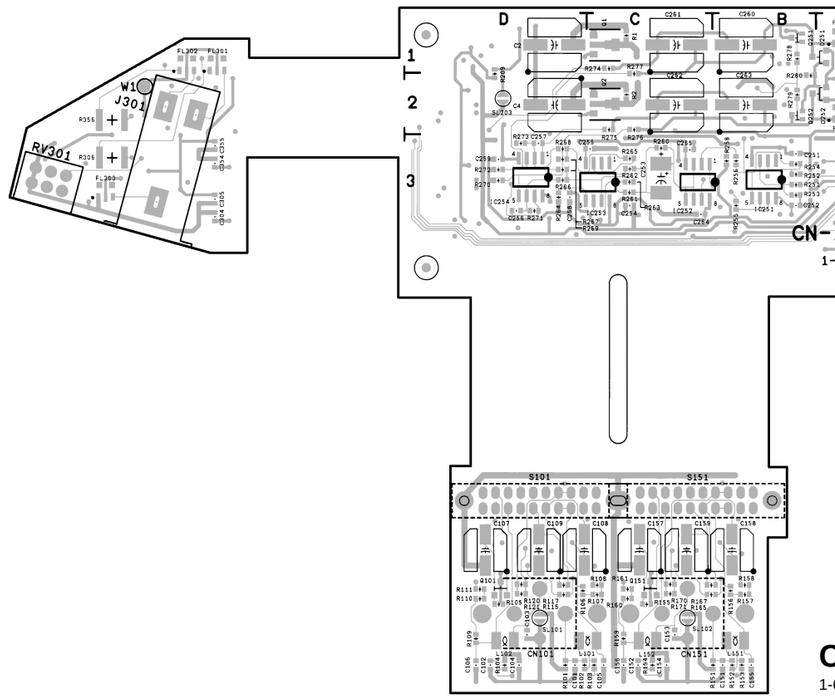
MB-651 BOARD (1-659-731-11)

CN101		A1
CN201		A1
CN301		A1
CN401		A1
CN402		A1
CN501	*	A1
CN502	*	A1
CN601	*	A1
CN701		A1
CN702		A1
CN703		A1
CN704		A1

* : B Side



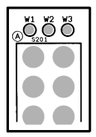
CN-1233 - A SIDE -
1-659-732-11



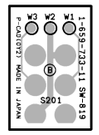
CN-1233 - B SIDE -
1-659-732-11

CN-1233 BOARD
(1-659-732-11)

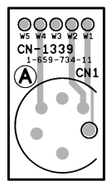
CN1		A3	J301	*	D3
CN2		A2	L101	*	C3
CN3		A3	L102	*	D3
CN101		D3	L151	*	B3
CN151		B3	L152	*	C3
D1		B2	Q1	*	C1
D101		C3	Q2	*	C2
D102		D3	Q101	*	D3
D151		B3	Q151	*	C3
D152		C3	Q201		B2
D201		B2	Q202		B1
D202		B1	Q251	*	B1
D251	*	B1	Q252	*	B2
D252	*	B2	Q300		B2
FL201		B2	Q301		D2
FL202		B1	Q302		D2
FL251	*	A1	RV301	*	D3
FL252	*	A2	S101		D3
FL301	*	D1	S151		B3
FL302	*	D1			
FL303	*	D3	* : B Side		
IC101		D3			
IC151		D2			
IC201		B3			
IC202		B3			
IC203		C3			
IC204		D3			
IC251	*	B3			
IC252	*	B3			
IC253	*	C3			
IC254	*	D3			
IC301		D3			
IC302		D3			
IC351		D3			



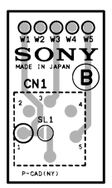
SW-819 - A SIDE -
1-659-733-11



SW-819 - B SIDE -
1-659-733-11



CN-1339 - A SIDE -
1-659-734-11



CN-1339 - B SIDE -
1-659-734-11

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